

AGRICULTURAL OUTLOOK

Economic Research Service
United States Department of Agriculture

April 1991

Limited Job
Prospects in
Food
Processing

April 1991/AO-173

AGRICULTURAL OUTLOOK

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News of Farm Income, Exports, Food-Related Job Prospects, the General Economy, EC Policies, and Broiler Futures

U.S. farmers' net incomes are forecast to drop in 1991 from recent records. While cash receipts are expected to remain near record levels, lower direct government payments and slightly higher farm expenses will pull down net incomes.

Net farm income is forecast to be \$42-\$47 billion, nearly one-tenth below a year earlier. Net cash income is predicted to be \$53-\$58 billion in 1991, compared with \$58 billion estimated for 1990.

Adjusted for inflation, farmers' net cash income likely will drop about 7 percent in 1991 from a year earlier. Still, real income is forecast up 20 percent from the 1984 low, and this year's expected drop is dominated by large supplies and weak demand in two markets—wheat and milk.

U.S. agricultural exports in fiscal 1991 are expected to drop slightly more than \$3 billion from a year ago to \$37 billion, the first drop in nominal terms since 1986. Export volume is projected to decline 18 million tons from 150 million a year ago. Reduced grain exports account for much of the expected drop, following record world wheat production, record grain production in China, and near-record grain output in the Soviet Union.

The drop in wheat export value is due primarily to much lower prices, while the drop in coarse grain exports is mostly a result of smaller volume. Sharply lower world wheat prices are not only reducing the value of U.S. wheat exports, but are also indirectly reducing U.S. coarse grain exports—producers globally are finding it economical to feed wheat to livestock. However, U.S. cotton exports are rising in a bullish market.

For U.S. winter wheat, concerns about dryness and pests in some areas boosted prices in early March. However, prices



are down more than a dollar a bushel from last year, and farmers' January planting intentions indicated that spring wheat plantings will drop more than a tenth. Although U.S. coarse grain exports are forecast down from a year earlier, total use is outpacing last fall's harvest. Farmers likely will increase coarse grain planted area several percentage points this spring.

U.S. retail beef and pork prices probably will rise more slowly in 1991 than in 1990, reflecting expected output gains. And retail prices of dairy and poultry products are forecast to average lower this year.

Food and beverage processors offer limited potential for U.S. rural employment growth in the 1990's. Just four food processing activities can be expected to offer brighter job prospects: poultry dressing, meat packing, cheese processing, and frozen fruit and vegetable processing. Employment will grow in several clusters of rural counties across the country that can provide the raw inputs for these operations. However, employment in the industry as a whole will continue to contract well into the 1990's.

Declines in general economic activity are cutting demand for some agricultural products. U.S. national output has declined since the recession began in the second half of 1990. The recession probably will continue for much of the first half of this year.

Lower inflation rates, interest rates, and crude oil prices will help hold down increases in farm production costs. Still, as the recession ends and the recovery begins, interest rates and the value of the dollar will move up, lifting farm costs and pressuring exports.

Within the EC, a lively debate is occurring over the future direction of the Common Agricultural Policy (CAP). However, formal discussions of some radical reforms that would sharply cut support to large producers have been shelved at least until summer. By that time, the EC Commission will have finalized the 1991/92 price package (comparable to the U.S. farm bill but done annually).

This year's price package likely will carry forward existing policies with only minor modifications. The outcome of the price package and the resolution of the CAP reform debate should show how far the EC is willing to go at the GATT talks.

Trading of broiler futures on the Chicago Mercantile Exchange resumed in early February after a 9-year hiatus, and cash settlements for the contracts were offered for the first time. Daily trading volume averaged 75 contracts during February and trended upward in early March.

When the first contracts expire this April and actual settlement occurs, some misgivings about contract liquidity should be dispelled. Also, as broiler prices enter the typically more volatile second and third quarters, opportunities for hedging may become more apparent.

Agricultural Economy



Growers Face More Uncertainties

U.S. farmers are beginning to plant their spring crops. They go to their fields concerned, as usual, about how much money they will make. However, uncertainty is up about commodity markets and farm income because of changes in federal farm programs, sharp competition in world grain markets, the ups and downs in the GATT talks, the California drought, the end of the Gulf war, turmoil in the USSR, and the recession.

Together, these factors mean most farmers will remain cautious about expanding their operations or making expensive improvements. The uncertainty dampens the urge to buy big-ticket items sometimes needed to grow different crops that are now possible under the new farm act's flexibility provisions. And the uncertainty restrains livestock producers from building up their herds and making the large investments necessary to sharply lift meat output in the long run.

Adjusted for inflation, farmers' net cash income likely will drop about 7 percent in 1991 from a year earlier. Still, real income will be up 20 percent from the

low in 1984, and this year's forecast drop is dominated by large supplies and weak demand in two markets—wheat and milk.

In 1990, world wheat production jumped nearly 10 percent, sharply boosting this year's supply. Wheat futures for September delivery were \$2.95 a bushel in mid-March, compared with \$3.66 a year earlier, so growers will plant less this spring. Last year's large crop was spurred by exceptional weather worldwide, strong early-season prices, and public policies in many countries that favored wheat production.

The price of milk has stabilized far below last year's average. During March-July 1990, users raced to accumulate stocks of cheese and nonfat dry milk, boosting the price of manufacturing milk 12 percent. However, when buyers realized these stocks were unnecessary, prices dropped 24 percent by yearend. Without such a price bubble this year, large surpluses will keep milk prices near support levels.

Oil prices were down to year-earlier levels in mid-March, so forecasts of farm expenses now show only a 2-percent gain from 1990. In inflation-adjusted terms, that's down 2 percent. But real direct government payments are expected down 8 percent, in part reflecting the loss of payment acres under the 1990 farm legislation.

The up side under the 1990 farm act is the new planting flexibility. Farmers are not stuck planting their original program crop on all of their permitted acres to be eligible for program benefits. In fact, they may flex up to 25 percent of their acreage base and plant other crops without losing base history. For example, some farmers with wheat base will shift to planting sunflowers and sorghum on their flexible acres.

Corn farmers are likely to plant mostly corn, a bit more soybeans, and some cotton on their flexible acres. Farmers in the South and West with enough water will boost cotton acreage. However, the reduction in payment acres increases the amount of uncertainty farmers must face—their incomes now depend more

on markets, and market prices never stand still.

Shifting to livestock, beef and pork output are each forecast to rise 1-2 percent this year, but prices may drift down from recent record highs. Poultry output is expected up 5 percent, but prices will drop several percentage points.

With the recession holding down income growth, consumers will take more livestock products out of the marketplace only at lower prices. However, feed prices are dropping this year, and probably will be the lowest since 1987.

Trade & Weather Will Be Critical

Trade and weather surprises have often altered the outlook for farm incomes. This fiscal year, U.S. agricultural export shipments have been lagging, and are expected to reach \$37 billion, down from \$40 billion in 1989/90. The estimate was revised down \$1.5 billion in late February as prospects for coarse grain sales worsened.

Shipments to the Soviets dropped 82 percent in October-December from a year earlier. And exports to the Soviets are more difficult to forecast this year because of questions about the USSR's ability to pay as the Soviet economy continues to contract. In 1989/90, sales to the Soviet Union accounted for over 7 percent of U.S. agricultural exports.

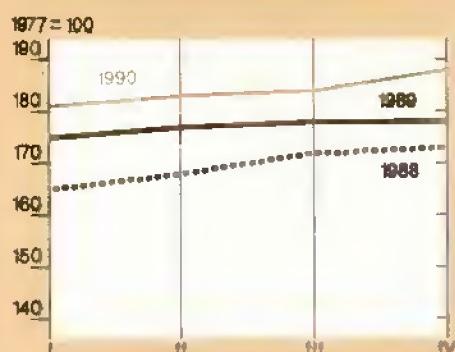
In early December the GATT talks were suspended—the EC refused to open up agricultural trade—and the prognosis for substantial trade liberalization was bleak. But ballooning costs of EC farm subsidies gave some impetus for a reevaluation there of agricultural trade issues. The talks resumed on January 15, and appear to be making some headway.

Failure to reach an agreement could prompt many nations to boost trade barriers relatively quickly, depressing world prices and trade flows. Yet, any agreed-upon cuts in trade-distorting farm supports would be subject to Congressional approval, and phased in over a number of years. With declining payment acres,

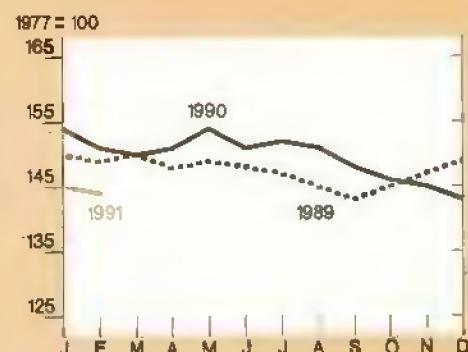
Prime Indicators

Agricultural Economy

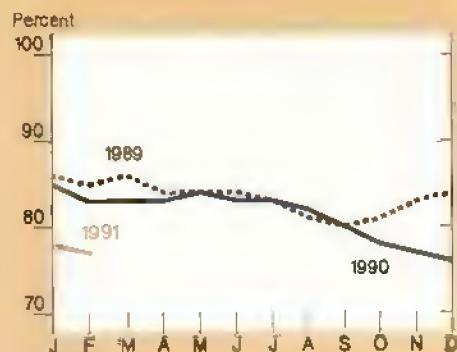
Index of prices paid by farmers



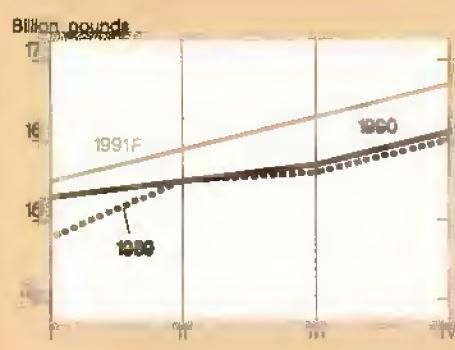
Index of prices received by farmers¹



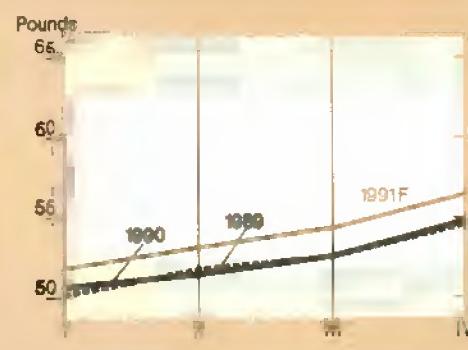
Ratio of prices received/prices paid



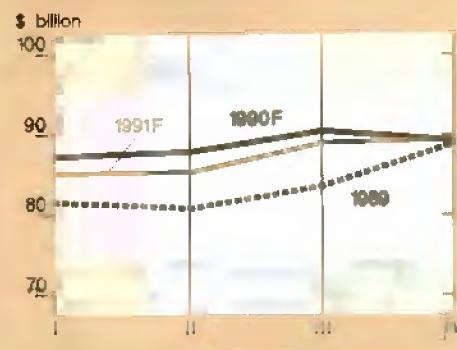
Total red meat & poultry production²



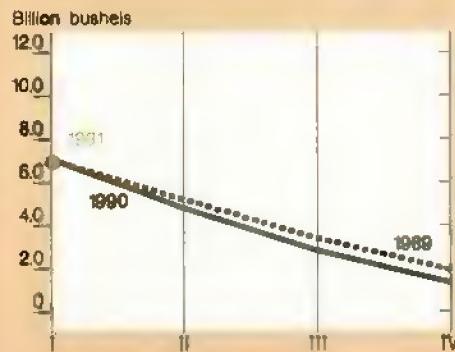
Red meat & poultry consumption, per capita^{2,3}



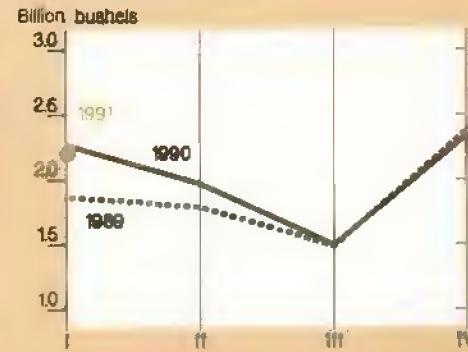
Cash receipts from livestock & products⁴



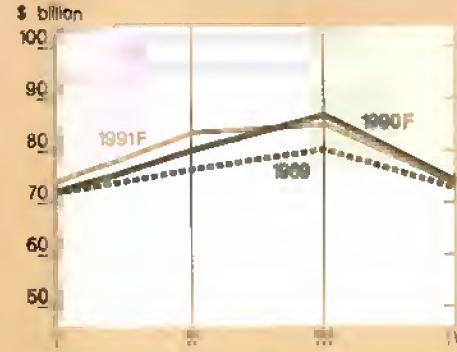
Corn beginning stocks⁵



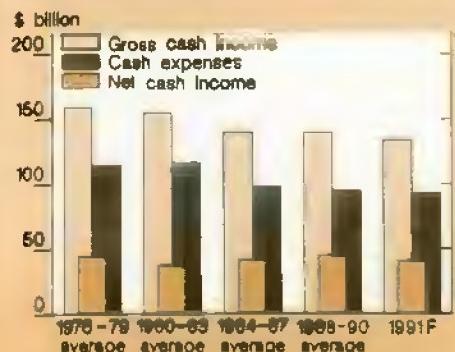
Corn disappearance⁵



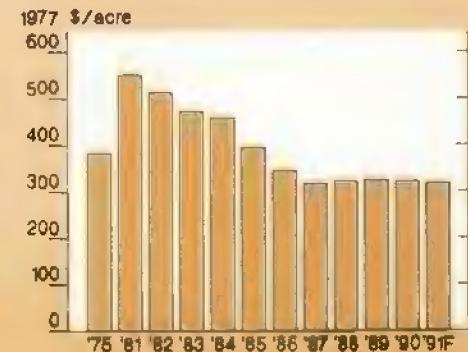
Cash receipts from crops⁴



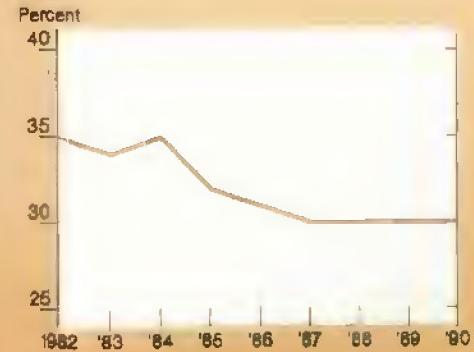
Real cash income⁶



Average real value of farm real estate



Farm value/retail food costs



¹For all farm products. ²Calendar quarters. Future quarters are forecasts for livestock, corn, and cash receipts. ³Retail weight. ⁴Seasonally adjusted annual rate. ⁵I=Dec.-Feb.; II=Mar.-May; III=June-Aug.; IV=Sept.-Nov. ⁶Cash expenses plus net cash income equals gross cash income. F=forecast.

Agricultural Economy

flexibility, frozen program yields, and acreage reduction programs, a strong case can be made that most U.S. commodity programs do not encourage excess output headed for the export market.

The changing outlook for soybean production in South America could also shift the domestic income picture. In March, the Brazilian and Argentine crops were expected to fall 11 percent from a year earlier. Dry weather in Brazil accounted for the drop and supported soybean futures prices. And the return of hyperinflation and other financial disruptions in the two countries boost uncertainties about the marketing patterns for their prospective crops.

Depending on how the economic, political, and weather situations evolve in South America, U.S. farmers may vary their plantings of soybeans from what they reported for the intentions surveys. Farmers in South America typically begin harvesting their soybeans in April.

At home, weather concerns will be foremost in farmers' minds until the fall harvest is complete. In California, growers are enduring a fifth year of drought, and agricultural output there will be down. Farmers in the state will grow less field and forage crops—especially cotton, rice, sugarbeets, and alfalfa. California is usually the largest producer of alfalfa, and the second largest producer of cotton, rice, and sugarbeets. With most planting still ahead, it is too early to tell how much output will decline.

Still, many California growers likely will be able to earn a higher return by selling their water instead of growing field crops. Fruit and vegetable output probably will be unaffected, though, as growers divert water from other uses to protect these high-value crops.

While other parts of the nation also have been dry, early-season moisture problems are generally less severe. In late February and early March, however, most of the West and Plains remained drier than normal. And the low soil moisture may slow early planting. The eastern half of the country had adequate to surplus moisture, while too much mois-

ture slowed some early planting in the Delta and parts of the Ohio Valley.

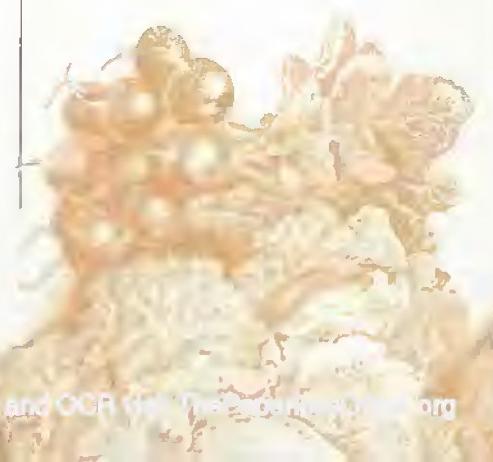
War & Recession To Have a Smaller Impact

The end of the Gulf war will substantially lift that region's trade. For U.S. agricultural exports, however, too many questions remain unanswered to accurately estimate how much of a rebound to expect. In fiscal 1989, the Middle East accounted for 5.7 percent—\$2.3 billion—of U.S. agricultural exports. Iraq alone purchased \$790 million worth, using a substantial amount of U.S.-guaranteed export credits.

U.S. sales to the Middle East fell 12 percent to just under \$2 billion in fiscal 1990, while shipments were down 26 percent in October-December from a year earlier. USDA is forecasting that exports to the region will fall 10 percent this fiscal year.

Concerns about the recession prompted the Fed to substantially ease monetary policy. And regulators are stepping up their efforts to encourage bankers to make new loans to creditworthy applicants. Most recently, accounting rules were eased in the hopes of spurring credit creation. This despite fears that eased regulations could mean another S&L-style money pit.

The optimism about the Gulf situation in early March also bolstered consumer confidence, which should promote spending. All these factors should mean a return to growth by the third quarter, which would provide a modest lift to the demand for farm-related products. [Gregory Gajewski (202) 219-0313] AO



Livestock, Dairy & Poultry Overview

As expected, U.S. cattle and calf numbers are expanding, with the inventory up about 1 percent from a year earlier. But the sheep and lamb inventory dropped for the first time since 1986, reflecting low farm prices for lamb.

Breeding hog inventories probably will rise in 1991, although producers have been slow to expand so far during this extended period of positive returns.

Retail beef and pork prices probably will rise more slowly in 1991 than in 1990, reflecting expected production gains. And retail milk and broiler prices are forecast to average lower this year.

Cattle Herd Expansion To Continue

In 1991, the cattle herd is expected to continue to expand because more cows and 3 percent more beef replacement heifers will mean a larger calf crop. The expected modest increase in cattle slaughter will be more than offset by the larger calf crop and continued large imports of feeder cattle from Mexico and Canada.

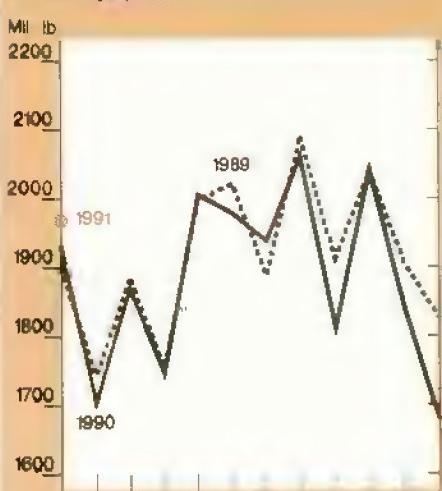
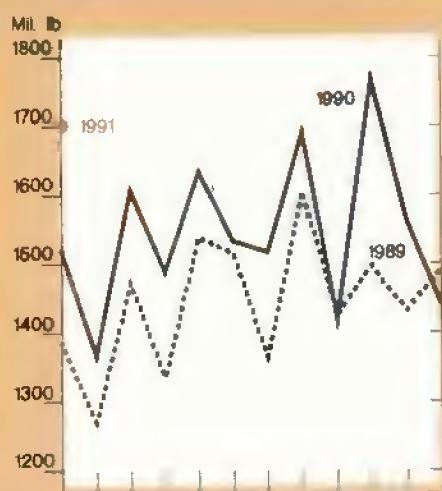
The January 1, 1991, cattle and calf inventory was reported at 99.4 million head, 1 percent above last year's revised number. The calf crop in 1990 was 39.9 million head, off 1 percent from 1989, and the smallest since 1960. Estimates of each January and July cattle inventory since January 1988—as well as the 1988 and 1989 calf crops—were revised downward.

The largest revision, down about 1.2 percent (1.1 million head), was made to the January 1989 inventory. The revisions indicated that the past cattle cycle's liquidation phase was deeper than previously reported. But 1989 was still the low point of the cycle.

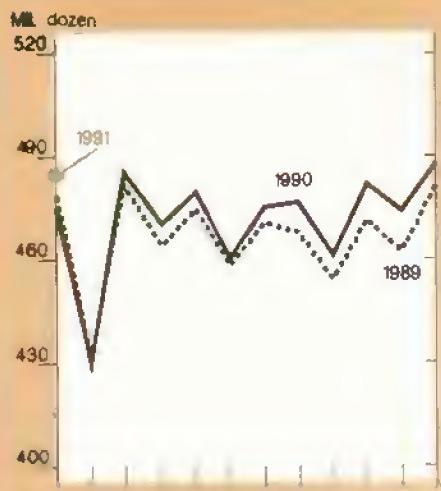
Livestock and Product Output

Agricultural Economy

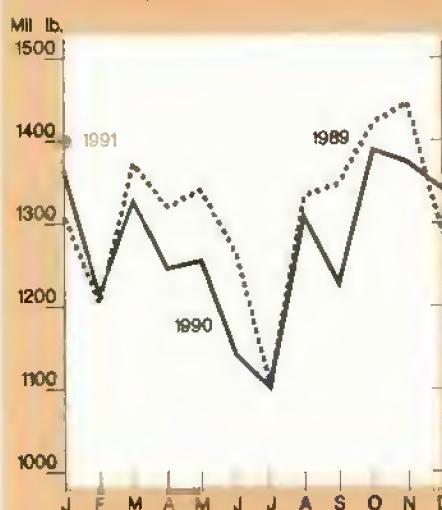
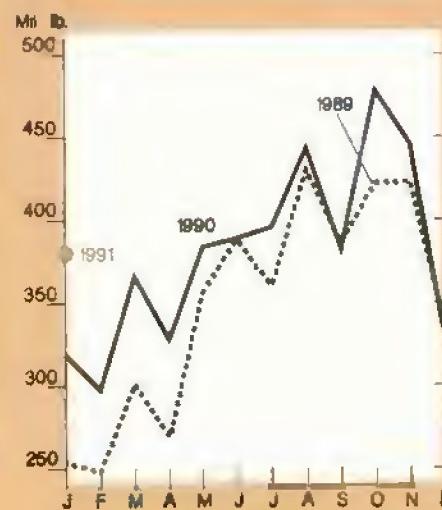
Commercial beef

Broilers¹

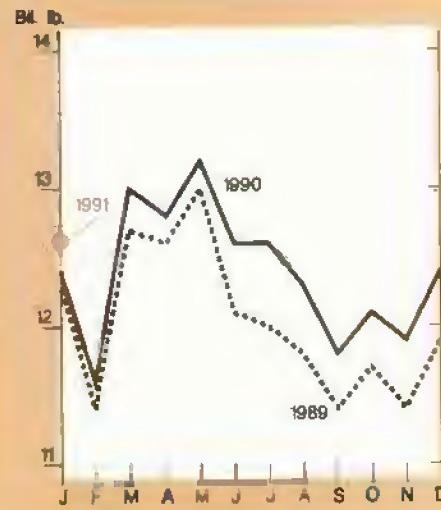
Eggs



Commercial pork

Turkeys¹

Milk



¹Federally inspected production, ready-to-cook.

Retail Choice beef prices in January remained near December's record \$2.95 per pound. Marketing spreads widened sharply during January as live cattle prices declined about \$1 per cwt while retail prices were off slightly.

The wholesale-retail beef spread widened to \$1.25 per pound, up 4.1 cents from a month earlier and 17.8 cents above a year earlier. Farm-wholesale spreads narrowed during January as packers operated with tight slaughter supplies.

In coming months, retail beef prices are expected to continue drifting down as slaughter levels rise from recent lows. But marketing spreads likely will remain

even or widen for a time until retailers increase beef specialing when they are sure supplies have risen. Farm-wholesale spreads probably will widen as cattle slaughter rates expand and live prices decline faster than wholesale prices.

Cattle slaughter rebounded sharply during the first 2 weeks of January, following holiday schedules. January's commercial cattle slaughter was about 1 percent above a year ago at 654,800 head per week. Last December, commercial cattle slaughter was unusually small, down about 9 percent from a year earlier, and posted the smallest weekly rate in a decade.

Cattle slaughter during first-quarter 1991 likely was down about 1 percent from a year earlier, and the lowest in over 10 years. However, heavier weights at slaughter should have kept beef production about even with a year ago.

On March 1, the number of cattle on feed in the seven monthly reporting cattle feeding states totaled 9 million head, 8 percent above a year earlier—and the highest inventory for that month since 1974. Marketings declined 1 percent, but placements were up 6 percent from last year. Cattle on feed will decline in coming months as marketings exceed placements.

Agricultural Economy

Sheep Inventory Declines

The sheep and lamb inventory at the beginning of the year was down 1 percent, the first decline since 1986. The drawdown is a reaction to continued low Choice slaughter lamb prices, which averaged \$55.54 per cwt at San Angelo for 1990, down 17 percent from a year earlier.

Production for 1991 is expected to be up one-half a percent to 360 million pounds, as producers trim the flock. Sheep producers' returns are now the lowest since the early 1980's, and are expected to stay low this year.

Lamb prices for 1991 are forecast to remain around 1990 levels. Slaughter prices in the first quarter likely averaged \$49-\$51. Spring holiday demand pulled prices up towards the end of the quarter. Second-quarter prices are expected to average in the upper \$50's to lower \$60's, before slipping to the low \$50's for the rest of the year.

Hogs To Remain Profitable This Year

Farrow-to-finish hog production was profitable in 1990 and is forecast to remain so in 1991. Cash costs are expected to average around \$40 per cwt of hog produced, capital replacement costs should average about \$6 per cwt, and receipts will top \$50. This normally would encourage producers to expand their breeding herds, though expansion so far has been slow.

Through February, hog prices averaged in the low \$50's, \$3 to \$4 higher than in 1990. However, prices are projected to be lower than a year ago in the second and third quarters as output rises. For all of 1991, hog prices are expected to average in the low- to mid-\$50's, compared with \$54 last year, and pork output is expected to be up about 2 percent.

Estimates of pork consumption on a retail and boneless trimmed basis have been revised. Conversion factors used to adjust carcass-weight pork disappearance to retail and boneless equivalent weights

did not fully reflect the shift to leaner hog production and marketing changes. Research results show that pork consumption, on a retail-weight basis, has been overstated in recent years, while boneless-weight consumption has been understated. Revisions have been made for 1955-91 (see table 10).

U. S. pork imports in 1990 totaled 897 million pounds, about the same as in 1989. Imports from the EC and Hungary were quite strong, but were offset by smaller shipments from Poland, Yugoslavia, and Canada. Danish and Canadian production are expected to increase later this year, helping to boost total U.S. pork imports about 5 percent in 1991.

On February 12, the U.S. International Trade Commission (USITC) noted that its hands were tied by the Binational Dispute Settlement Panel and ruled that U.S. hog producers were not threatened with injury from imports of fresh, chilled, and frozen pork from Canada. In the absence of any appeals, this ruling will mean canceling the countervailing duty and refunding deposits collected by U.S. customs.

But the National Pork Producers' Council announced their decision to appeal the USITC injury ruling through an extraordinary challenge. These challenges are handled on a government-to-government basis. The U.S. Trade Representative now must decide whether or not to raise the issue with the Canadian government.

Live hog imports from Canada totaled 886,277 head in 1990, down 17 percent from 1989. All of the decline was in hogs for slaughter. The number of feeder pigs imported rose 20 percent. In 1991, hog imports from Canada are expected to be virtually unchanged.

U. S. pork exports in 1990 were down to all markets and totaled 238 million pounds compared to 262 million in 1989. This year's exports are likely to increase to about 240 million pounds. More will likely be shipped to Japan and Mexico.

Broiler Prices To Slip Slightly

Second-quarter wholesale prices probably are averaging 52-58 cents a pound, compared with almost 57 cents a year ago, based on a 6- to 7-percent increase in supplies and lower exports. Average prices are expected to remain in the low-to-mid-50's for the rest of the year.

Retail prices probably will average in the high 80's, slightly below a year earlier.

For all of 1991, output is projected to increase 5-6 percent to about 19.6 billion pounds, influenced by last year's strong net returns. Approximately 5 percent will be exported. Lower prices for broilers relative to other meats, coupled with the increasing availability and variety of processed products, are spurring consumption. Per capita consumption is projected at 74 pounds this year, up from almost 70 pounds in 1990.

U.S. broiler exports rose 40 percent in 1990 to a record 1.1 billion pounds. The USSR accounted for about one-fourth of the total followed by Japan, Hong Kong, and Mexico.

Exports in 1991 are projected to decline about 10 percent from last year. The USSR is facing a very tight export credit situation, and has exhausted all U.S.-supplied credit guarantees. Sales to other markets are expected to be unchanged.

Turkey output rose an estimated 7 percent from a year ago in the first quarter, on top of last year's 22-percent jump. Poultry placements from November through February indicate that second-quarter output probably will increase 4-5 percent, compared with 9 percent a year earlier. For all of this year, output is forecast up 5 percent, versus 9 percent during 1990.

A sharp price drop late in 1990 and financial losses by growers since December will restrain production increases this year. Despite moderate output growth, wholesale prices firmed slightly in February, probably in response to slightly lower stocks and prospects of brisk sales during Easter. Eastern region wholesale

turkey hen prices averaged 53-57 cents for the first quarter, and likely are rising to 55-61 cents in the second quarter.

Turkey meat exports increased 32 percent to 54 million pounds in 1990, the highest in 10 years. Largest increases were to Mexico and the Pacific region, which together took nearly 70 percent of the shipments. The outlook points to continued brisk exports to these areas in 1991.

Egg Output To Continue Up

A slightly larger layer flock will produce about 5.7 billion dozen eggs in 1991, about 1 percent above 1990 and the same percentage gain as last year. Hatching-egg production likely will expand 4-5 percent, and table-egg production is expected to increase about half a percent.

Indicators of future flock size—egg-type eggs in incubators and egg-type chicks hatched—show a flock size during first-half 1991 that is only slightly larger than a year earlier. The table-egg flock on February 1 was about the same as a year earlier, as was the total flock of 273.8 million hens.

Second-quarter table-egg output is expected to increase about 1 percent from a year earlier, following a 1- to 2-percent increase in the first quarter. Third-quarter output probably will increase only fractionally from a year ago. Requirements for Easter will subside quickly in the second quarter, and lower prices and returns are expected to follow.

Prices for New York wholesale Grade A large eggs are expected to average 74-80 cents per dozen this year, compared with the record 82 cents of the past 2 years. Second-quarter wholesale prices are expected to average in the low 70's, compared with almost 75 cents a year earlier. Retail prices in 1990 averaged \$1.01 per dozen, about the same as a year earlier. Lower average retail prices are expected in 1991.

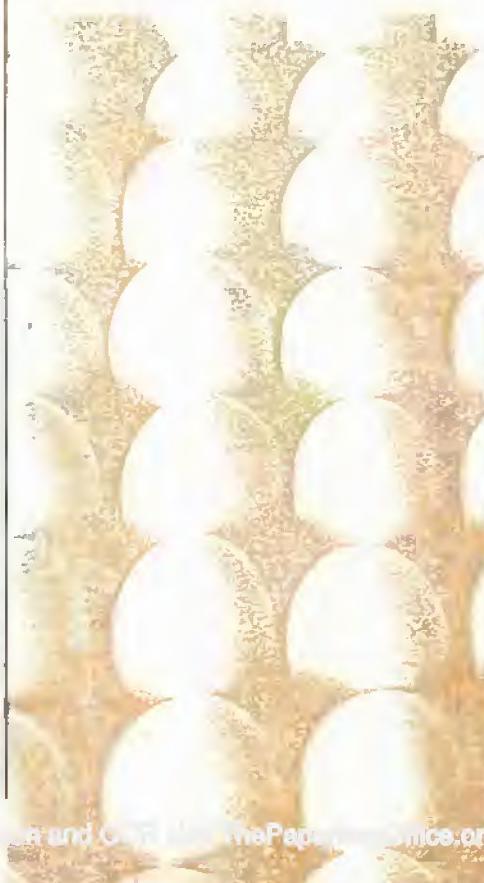
Retail Dairy Prices Are Falling

Retail dairy product prices continue to decline slowly in response to sharply falling farm milk prices. In February, prices dropped 1.3 percent from a year earlier and were unchanged from a month earlier.

The lower farm milk prices expected for 1991 will continue to pull down retail prices. For all of 1991, retail dairy prices are expected to decline 1-4 percent.

Retail prices were slow to follow the drop in milk prices that started in August 1990. Between August 1990 and February 1991, farm milk prices fell more than 20 percent, while retail prices fell about 2 percent. But the sluggish economy will put retailers under pressure to cut prices faster.

For further information, contact: Ken Nelson, coordinator; John Ginzel, cattle; Richard Stillman, sheep; Leland Southard, hogs; Lee Christensen, Agnes Perez, and Larry Witucki, poultry; Jim Miller and Sara Short, dairy. All are at (202) 219-1285 AO



Field Crops Overview

Even with U.S. coarse grain exports down from a year earlier, total use is outpacing last fall's harvest, and ending stocks will drop. With lower Acreage Reduction Program (ARP) requirements and more program flexibility, coarse grain area will rise several percentage points this spring.

For U.S. winter wheat, concerns about dryness and pests in some areas lent support to prices in early March. However, prices are down more than a dollar a bushel from last year and farmers' January planting intentions indicated that total wheat area likely will drop more than 10 percent. The March Prospective Plantings report was scheduled for release on March 28, after this AO had gone to press.

U.S. Feed Use To Set a Record

Despite a forecast 10-million-ton gain in domestic feed grain consumption in 1990/91, sluggish exports are expected to pull total use down from a year earlier. Exports are down because of improved crops in several countries, intense competition from low-priced wheat for feeding livestock in several key markets, and a huge decline in Soviet purchases. Economic and political chaos in the Soviet Union has contributed to a significant deterioration in U.S. trade prospects for 1990/91.

Corn comprises over 85 percent of the coarse grains fed to livestock and poultry in the U.S. Use of corn is expected to rise almost 400 million bushels from 1989/90 to over 4.8 billion—a record.

Feed demand for corn is expected to be up in 1990/91 because of larger numbers of cattle on feed and increased poultry production. However, if farmers follow through with their earlier intentions to reduce the number of sows farrowing, slightly less feed may be needed by hog producers late in the feed year.

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Total U.S. corn use (including exports) is forecast to fall below 8 billion bushels, more than 100 million below 1989/90. Nonetheless, consumption continues to outpace last fall's harvest, and domestic ending stocks are expected to drop about 4 percent.

Sorghum disappearance in 1990/91 is below a year earlier. Relatively tight supplies and firm prices likely will hold down sorghum use in the second half of 1990/91. Ending stocks are forecast to fall to only 76 million bushels, down from 440 million in 1988/89 and 220 million in 1989/90.

The last time sorghum stocks were this small was in 1974/75. Farmers' early-January planting intentions suggested a sharp gain in area this spring.

Farm prices for corn and sorghum in 1990/91 are expected to be around 1989/90's \$2.36 and \$2.10 per bushel. Barley and oats prices, however, are forecast down about 30-35 cents each.

U.S. Wheat Prices Are Down Sharply

U.S. farmers are responding to higher ARP requirements and continued low wheat prices by cutting plantings. Winter wheat plantings were down 10 percent, and farmers said they intended to plant 13 percent less spring wheat for harvest in 1991 than a year earlier.

The wheat marketing year will begin in June with inventories of more than 950 million bushels, 80 percent above a year earlier.

Foreign wheat output is likely to drop as well in 1991/92. Less area will be planted in some of the major exporting countries and possibly some of the major importing countries. Wheat yields are unlikely to match the records and near-records set last year. However, relatively large stocks will mean that unless there is a substantial drop in output, U.S. exporters will face another year of intense competition.

Through March 18, wheat prices have not shown their normal seasonal

increase. Wheat prices are forecast to average \$2.55-\$2.65 a bushel for 1990/91, down sharply from the \$3.72 registered during 1988/89 and 1989/90.

Rice ARP To Raise Plantings?

Provisions of the 1991 U.S. rice program were announced on January 30, 1991. To be eligible for program benefits, producers must idle 5 percent of their acreage base, compared with 20 percent in 1990, 25 percent in 1988 and 1989, and 35 percent in 1986 and 1987.

The target price is \$10.71 per cwt, the same as in 1990. The national average loan rate is \$6.50 per cwt, the legislative minimum and the same as in 1990 as well. Advance deficiency payments will be 40 percent of the estimated deficiency payment rate of \$3.76 per cwt.

The 50/92 provision will again be available as in 1986-90. Under this provision, farmers who underplant their maximum-payment rice acreage by at least 8 percent and plant no less than 50 percent of their maximum-payment acreage may receive deficiency payments based on 92 percent of their maximum-payment acreage.

Wheat Output Surges 18 Percent in Two Seasons

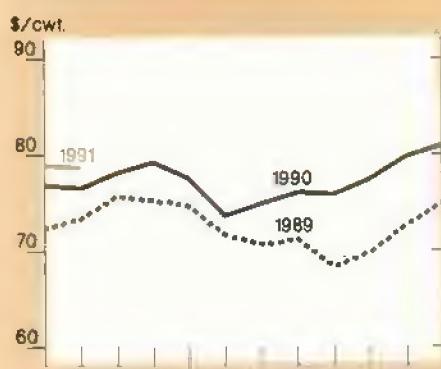
	1988/89	1989/90	1990/91
<i>Million metric tons</i>			
WORLD			
Wheat			
Production	500	537	589
Use	532	534	563
Exports	97	97	93
Ending stocks	117	119	145
Corn			
Production	401	463	471
Use	459	479	473
Exports	64	73	59
Ending stocks	88	72	70
Soybeans			
Production	96	107	105
Use	98	104	105
Exports	23	27	25
Ending stocks	18	20	21
UNITED STATES			
Wheat			
Production	49	55	75
Use	27	27	35
Exports	38	34	28
Ending stocks	19	15	26
Corn			
Production	125	191	202
Use	133	146	157
Exports	51	60	47
Ending stocks	49	34	33
Soybeans			
Production	42	52	52
Use	31	34	34
Exports	14	17	15
Ending stocks	5	7	10

Note: Exports of wheat and corn do not include intra-EC shipments. Data are for marketing years. The wheat year is July/June, and the soybean and corn marketing years are October/September.

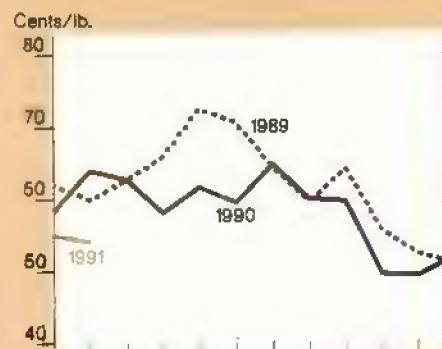
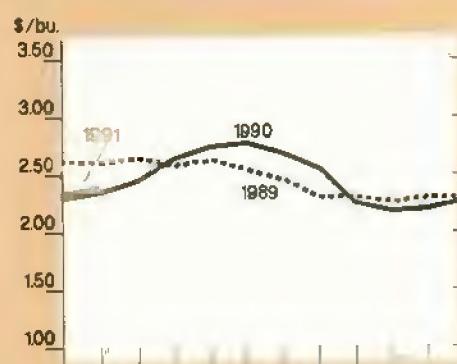
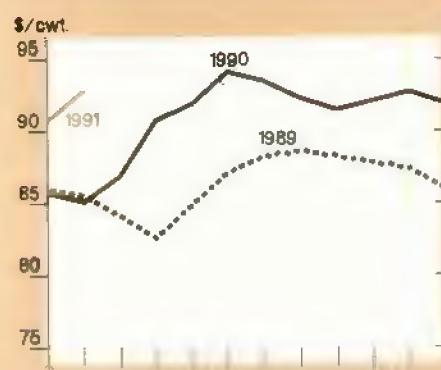
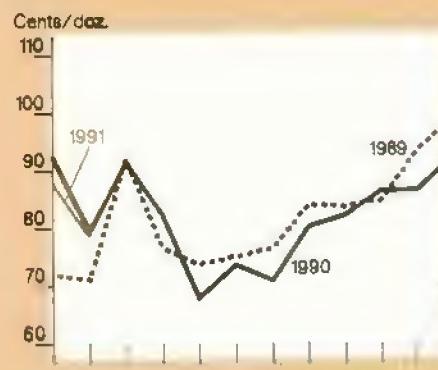
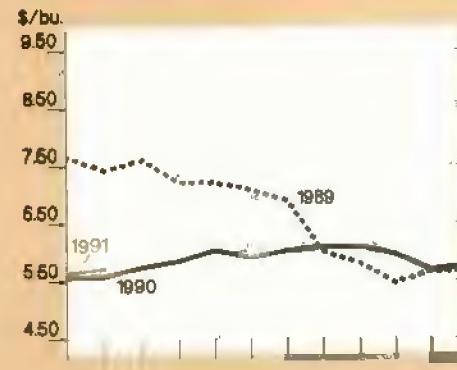
Commodity Market Prices

Agricultural Economy

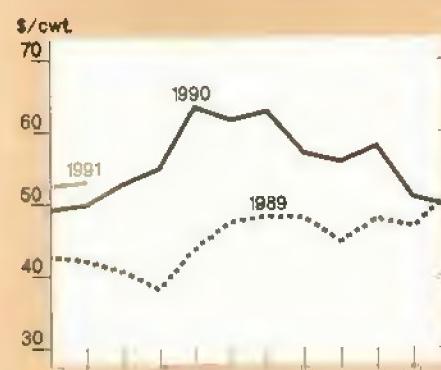
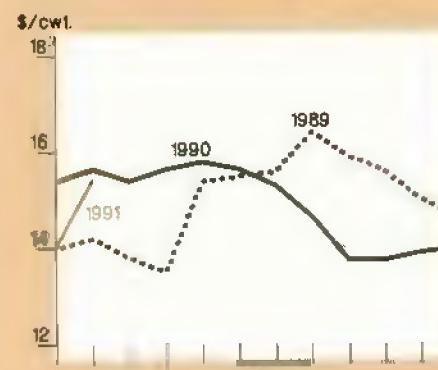
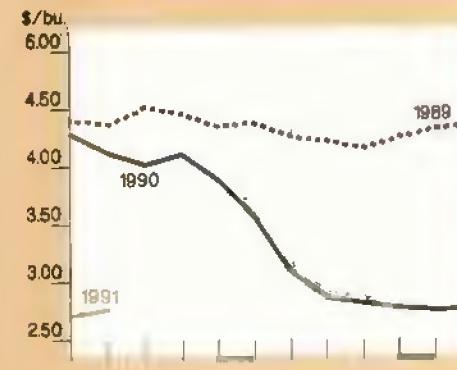
Choice steers, Omaha



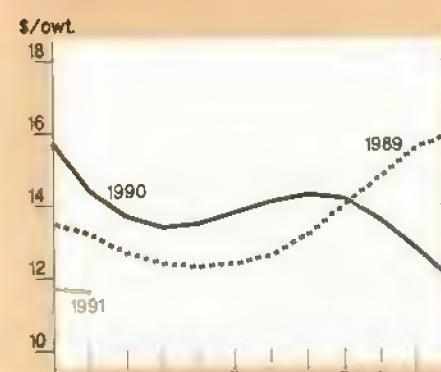
Broilers, 12-city average

Corn, Central Illinois¹Feeder cattle, Kansas City^{2,3}Eggs, New York⁴Soybeans, Central Illinois⁵

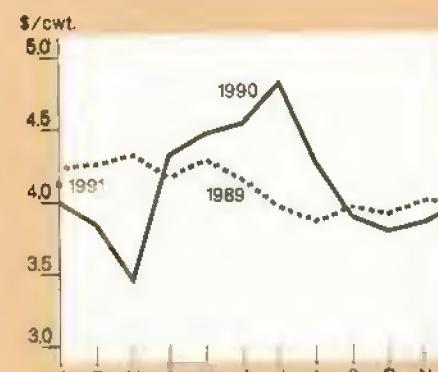
Barrows and gilts, 7 markets, Omaha

Milled rice, SW Louisiana⁶Wheat, Kansas City⁷

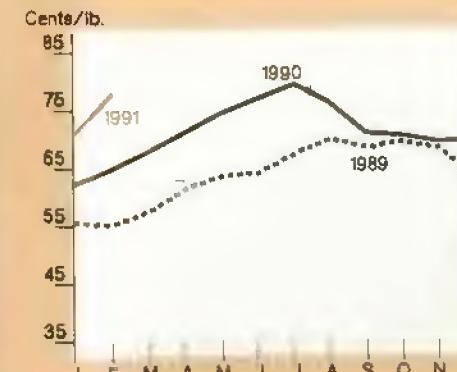
All milk



Sorghum, Kansas City



Cotton, average spot market

¹No. 2 yellow ²600-700 lbs medium no. 2. ³October data not available. ⁴Grade A large. ⁵No. 1 yellow. ⁶U.S. No. 2, long-grain. ⁷No. 1 HRW.

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However, the 50-percent requirement may be reduced if a farmer is prevented from planting due to circumstances beyond his control. Notices have recently been mailed to county ASCS offices explaining how this part of the program works.

The substantial cut in the ARP requirement would ordinarily be expected to encourage growers to plant more rice. However, the 1990 farm legislation reduced the area covered by deficiency payments. High costs for some rice farmers will limit the number of flexible acres planted with rice. As a result, any potential planting gains because of the lower ARP likely will be offset somewhat by reduced plantings on the flexible acreage.

In addition, the ongoing California drought may force growers there to drastically cut rice plantings this year. In 1988 and 1989, California produced 19-21 percent of all U.S. rice and 60-64 percent of medium grain rice.

In 1990, California's share of medium grain production slipped to 57 percent because its farmers increased plantings only 800 acres while growers in Arkansas and Louisiana increased plantings 69,000 acres. And medium grain acreage may increase again in Arkansas and Louisiana in 1991/92.

Brazil Pulls Down Global Bean Output

World oilseed production for 1990/91 is forecast at a record 217 million metric tons. But soybean output probably will drop 2.3 million metric tons. South American soybean output, pressured by area declines in Brazil, likely will drop 2.8 million metric tons from a year earlier. But this offers only a limited opportunity for the U.S. to recapture lost market share.

Brazil's area is down in response to government policies directing farm credit toward food crops. And farmers there apparently have cut back on chemical and fertilizer inputs. Weather has been a factor as well, with severe dryness in Brazil's southern states since mid-

December. So yields are expected to show a modest drop.

Global demand for soybeans and meal likely will lag last year's. Bean imports by the EC are forecast down 4 percent and the prospects for additional meal imports by the USSR are constrained by a lack of credit. The USSR has already exhausted a major U.S. credit package.

As a result, U.S. exports will be down and stocks of soybeans, oil, and meal will be higher by the end of the marketing year. Although stocks will be up, strong domestic use and declines in foreign inventories are likely to keep the season-average price about even with last season's \$5.70.

Farmers surveyed in early January said they planned to plant 58.5 million acres of soybeans, up 1 percent from a year ago. Actual plantings won't begin until late this month.

Factors that would boost U.S. plantings include a smaller South American crop, signs of a strengthening export market, and lower soybean stocks abroad. Despite new planting flexibility, price fundamentals still favor corn in the Midwest.

Last year's peanut crop was down nearly 10 percent to 3.6 billion pounds, reflecting the effects of drought in the Southeast. The smaller crop is holding down forecast exports to 525 million pounds from last year's strong 989 million.

With half the marketing year over, domestic use of manufactured products like peanut butter and salted nuts is down 5 percent. Last year's production shortfall led the USITC to hold hearings on raising the import quota for 1990/91. The Commission's recommendation is expected on March 22.

Cotton Planting Is Beginning

As planting commences in the far southern portions of the U.S. cotton belt, producers are closely scrutinizing domestic and international events for the impacts on future cotton prices.

Continuing strong demand this season is brightening early prospects for the 1991/92 U.S. cotton crop. Exports likely will reach 8 million 480-pound bales in 1990/91, up 4 percent from a year ago. Larger exports are expected to offset a decline in domestic mill use. Ending stocks on July 31 are projected at 2.3 million bales, the lowest in 66 years.

Strong demand for U.S. cotton and continued tight foreign stocks contributed to a dramatic price rise in the U.S. and Northern Europe in February. This may boost interest among nontraditional growers.

But in California, the protracted drought is expected to hold down plantings. Acreage there could drop 20-30 percent below 1990's 1.1 million acres, according to industry estimates. [Jim Cole (202) 219-0840]

For further information, contact: Sara Schwartz, world food grains; Edward Allen, domestic wheat; Janet Livezey, domestic rice; Pete Riley, world feed grains; Larry Van Meir and Jim Cole, domestic feed grains; Tom Bickerton, world oilseeds; Roger Hoskin, domestic oilseeds; Carolyn Whitton, world cotton; Scott Sanford, domestic cotton; Jim Schaub, domestic peanuts. World information (202) 219-0820; domestic (202) 219-0840. AO



Specialty Crops Overview

Retail fresh fruit prices are expected to remain above a year ago through the spring and summer due to last December's freeze damage in California and a smaller 1990 apple crop. However, fruit and vegetable supplies are not expected to be seriously affected by the California drought.

Domestic sugar use rose almost 4 percent in 1990 from a year ago and was the largest since 1983. Per capita use also was up. Consumption gains are expected to continue.

Although domestic cigarette use remains on the decline, U.S. tobacco output is expanding because of growing U.S. cigarette exports. And economic reform in Eastern Europe and the Soviet Union promise even greater export opportunities.

Fresh Fruit Prices To Remain High

Consumer prices are running well ahead of a year ago due to a smaller apple crop and reduced fresh citrus supplies caused by last December's freeze. The freeze destroyed over half of California's oranges and cut lemon output.

The U.S. average retail price for Red Delicious apples climbed to 81 cents a pound in January, up from 60 cents a year earlier. Navel orange prices climbed 46 percent and lemon prices rose 16 percent in the month following the freeze.

Washington apple production was 6 percent smaller in 1990 than a year earlier because of smaller fruit sizes. Consequently, fresh shipments out of the state were running 13 percent below a year ago as of mid-February.

Shipping point prices for Red Delicious f.o.b. Washington (controlled atmosphere storage) averaged 41 cents a pound in January, up from 25 cents a year earlier. Controlled atmosphere storage uses nitrogen to slow respiration of warehoused apples and is superior to regular cold storage in maintaining quality over a longer period of time. Most apples marketed after February 1 are from controlled atmosphere storage.

Retail prices for fresh oranges are expected to remain at record highs through the spring and summer due to smaller supplies of California navel and valencia oranges. California valencias typically are the principal fresh orange available during the spring and summer.

In March, the California valencia crop was forecast at 413,000 short tons, 59 percent below a year earlier and 52 percent less than prospects prior to the freeze.

Florida stepped up its shipments of fresh oranges following the California freeze because of higher fresh market prices and lower processing prices. The Florida Department of Citrus estimates that 13.5 million 90-pound boxes of oranges, or 8 percent of the Florida crop, will be shipped for the fresh market this season, the biggest share since 1967/68.

The smaller fresh orange supplies likely contributed to higher apple and banana prices. Banana prices increased 2 percent in January from a month earlier.

Retail prices for processed fruit remained relatively unchanged following the California freeze. Lower prices for fruit juices and frozen fruit (primarily frozen concentrated orange juice) continue to offset higher prices for canned and dried fruit.

Vegetables Remain Plentiful Despite the Drought

Although California is the major U.S. producer of many fruits and vegetables, supplies in 1991 are unlikely to be noticeably affected by the state's worst drought

in years (see the Resources article in the March AO). Virtually all of the state's fruits and vegetables are irrigated.

Producers in the southern San Joaquin Valley are the hardest hit by the drought. The San Joaquin is one of California's major fruit and tree nut areas. In addition, it supplies fresh vegetables such as lettuce, broccoli, and carrots during the fall and early winter. However, several characteristics of fruit and vegetable farming in California will limit the drought's impact.

First, California fruit and vegetable producers in the southernmost counties irrigate with water from the Colorado River, which has ample supplies this year, or they pump water from underground wells.

Second, fruits and vegetables are high-value crops and the returns per gallon of irrigation water used are higher than for field crops such as cotton, rice, alfalfa, and other hay. So, when growers face reduced water supplies, they will divert water from field crops to fruits and vegetables in order to maximize profits.

Specialty Vegetables Gain Popularity

Although the market for specialty vegetables is small, it is the fastest growing segment of the vegetable industry. Supplies of specialty vegetables, including imports, are increasing 12-15 percent a year. The biggest percentage gains in 1989 from a year earlier were among oriental vegetables (29 percent), southern and snow peas (19 percent), and tropical fruits and vegetables (18 percent).

Specialties are variously defined, but generally include herbs and spices, oriental and other ethnic vegetables, tropical fruits and vegetables, and baby vegetables (usually fully ripe miniature varieties).

California, the largest specialty vegetable supplier, reported that production rose 17 percent in 1989. The biggest increases were in oriental vegetables, herbs and spices, rippini, and chili peppers. California reported harvesting nearly 1,300

Agricultural Economy

acres of baby vegetables in 1989. It also was the major supplier of fresh herbs, followed by Florida and Mexico.

Ethnic food stores always have been an important marketing outlet for specialties. But, many high-volume retailers have added specialty sections in recent years to enhance the image of their produce departments. The market for specialties is expected to continue growing as the appeal of unusual items rises and the purchasing power of various ethnic groups expands.

Per Capita Sugar Use Is Rising Again

U.S. sugar consumption in calendar 1990 was the highest since 1983. Confectionery, bakery, and cereal products scored the biggest increases in use. Rising 3.9 percent from a year earlier, sugar use in 1990 is estimated to have been 8.6 million tons, raw value.

After peaking in 1977 at 11.1 million short tons, sugar use fell until 1986. The biggest declines came between 1980 and 1985 when sugar was replaced with high fructose corn syrup (HFCS) in most soft drinks. After 1986, the possibilities for replacing sugar with HFCS in manufactured food products became more limited.

Per capita sugar consumption declined from 94.2 pounds in 1977 to 59.7 pounds in 1986, then leveled off. Currently, per capita consumption shows signs of growing, having increased to 64 pounds in 1990, up from 62.2 in 1989.

Cigarette Exports Drive Tobacco Demand

While domestic U.S. cigarette consumption fell in 1990, output rose 3.4 percent and exports rose 16 percent. Exports to Belgium and Luxembourg showed an especially large gain. Because trade statistics do not show the final destinations, some of the extra cigarettes shipped to those countries probably moved on to other European countries.

Economic reforms in Eastern Europe and the Soviet Union are expected to open

markets to more U.S. products. The bulk of a purchase negotiated between the USSR and U.S. tobacco companies, reportedly involving the sale of 35-40 billion cigarettes over 2 years, likely will be shipped in 1991.

U.S. cigarette consumption fell an estimated 3 percent in 1990 to 524 billion. The decline is expected to continue in 1991 because of health concerns among cigarette users, higher taxes and increased prices, antismoking publicity, the declining social acceptance of cigarette smoking, and further restrictions on where people can smoke.

The national basic flue-cured marketing quota for 1991 is the same as a year earlier (877.7 million pounds) while the burley quota was increased 20.5 percent to 726 million. Because of unused quota carried over from the previous year, the effective quotas for flue-cured and burley are 892 million and 875 million pounds.

The jump in the burley quota reflects a tight supply-demand situation. Undermarketings of burley have risen in recent years as some growers have stopped producing tobacco. Many burley growers have very small quotas and have not been able to afford cost-cutting methods used by flue-cured growers.

Legislation passed in 1990 will for the first time permit the sale of burley marketing quotas within individual counties. In addition, lease and transfer of quotas across county lines is now permitted in Tennessee. As a consequence, undermarketings of burley are expected to decline. Small growers who are not using their quotas are expected to sell or lease them to larger producers. The average size of flue-cured quotas grew after their sale was permitted in 1982. [Glenn Zepp (202) 219-0883]

For further information, contact: Boyd Buxton, fruit; Gary Lucier, vegetables; Peter Buzzanell, sweeteners; Verner Grise, tobacco; Doyle Johnson, tree nuts and greenhouse/nursery; David Harvey, aquaculture; Lewrene Glaser, industrial crops. All are at (202) 219-0883. **AO**

Commodity Spotlight



Broiler Futures Trading Resumes

Trading of broiler futures contracts at the Chicago Mercantile Exchange (CME) resumed on February 7, 1991 after a 9-year hiatus. And cash settlements for the contracts were offered for the first time. The contracts are a hedging instrument for use by processors, food wholesalers, integrated broiler operators, grocers, food service operators, and others who regularly buy or sell chicken products. The contracts also provide a speculating instrument for traders.

Trading volume in broiler futures contracts likely will grow as their potential becomes better recognized. Many potential participants are still assessing how to incorporate the contracts into their regular business activities. As with any new contract, it will take some time for the broiler futures contracts to become widely understood and used.

While technically a revision of the broiler contract which traded from 1979-82, the addition of the cash settlement feature and the expansion of the broiler industry make it for all practical purposes a new contract. The initiative to

Commodity Spotlight

revitalize the contract came from companies within the broiler industry. It is the first new agricultural futures contract to be traded on the CME since the plywood contract was added in 1981.

A broiler futures contract is a legal contract to buy or sell broilers on a specified date at a specified price. Contracts are traded that mature in 8 specific months: February, April, May, June, July, August, October, and December. The last day of trading for each contract ends at 12 noon, Chicago time, on the second-to-last Friday of the month it matures.

Each contract is for 40,000 pounds (the size of a standard truckload of broilers) of ready-to-cook broiler chicken, with the cash settlement price based on USDA's composite 12-city broiler price. The minimum price change allowed is .025 cents per pound (\$10 per contract) and the daily price movement limit is 2 cents per pound (\$800 per contract) above or below the previous day's settlement price.

Number of Contracts Expected To Rise

The CME recognized that it would take time for daily trading volume to reach

levels that provide sufficient market liquidity. Initial goals were for daily trade levels to reach about 500 contracts as quickly as possible. The number of contracts cleared on opening day was 170—in line with the CME's expectations. Trading volume on the second day was 234 contracts, but then trended lower for the rest of the month.

The number of contracts cleared daily (i.e., bought and sold) during February averaged 75, and the number of open contracts averaged 158. An open contract is a futures contract entered into but not yet fulfilled by an offsetting transaction. Daily trading volume increased in March, and averaged 162 contracts during the first week. Open contracts reached 546.

Several factors will influence the widespread use of the contracts, including a build-up of sufficient daily volume to attract traders, and increased involvement of commercial producers. Trading interest may also be stimulated if there is greater use of the 12-city composite price for regular broiler purchases, rather than the various dock prices such as the Georgia dock.

The 12-city price represents sales to first receivers near the point of consumption

while the dock prices are near the point of production. There is a high correlation between these prices, with the difference reflecting transportation costs. However, there is a strong tradition to use dock prices as the basis for pricing contracts between processors, wholesalers, and retailers. And it likely will take time for the 12-city price to be more widely accepted and written into contracts.

Trading also may increase as the cash settlement feature becomes better understood. When the first contracts expire in April and actual settlement occurs, some misgivings about contract liquidity should be dispelled. Also, as broiler prices enter the typically more volatile second and third quarters, opportunities for hedging and speculating may become more apparent.

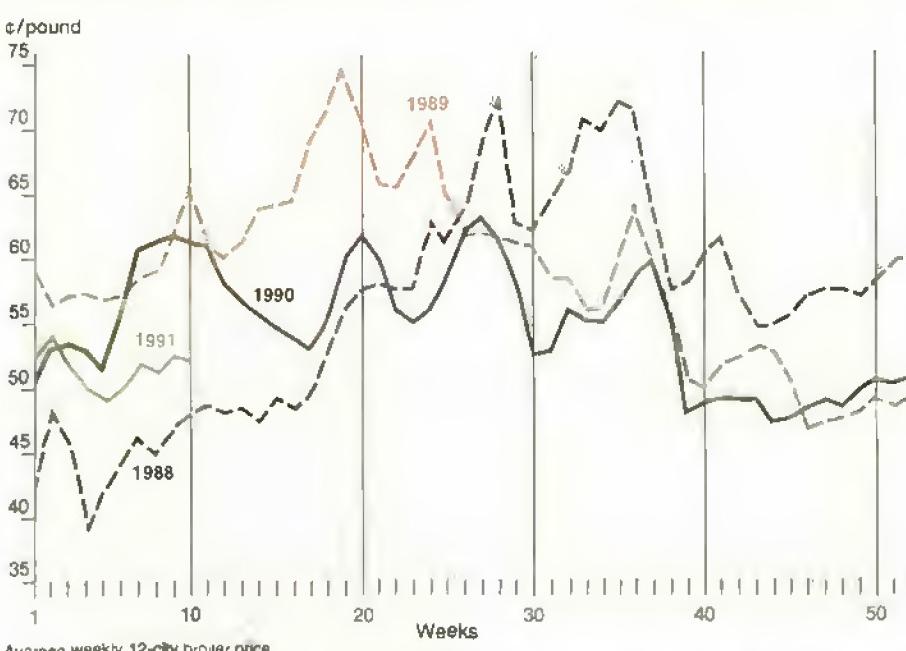
New Contract Allows for Cash Settlement

The main difference between this contract and the earlier one is the use of cash settlements. Contracts held to maturity are settled by the exchange of cash rather than by delivery of the commodity as in most agricultural futures contracts. So, persons holding positions at the end of the last day of trading will have added or subtracted from their brokerage accounts amounts equal to the difference between the closing futures price and USDA's composite 12-city broiler price released on the following Monday.

This arrangement assures that the futures price will converge to the 12-city broiler price on the last day of trading and eliminates the need to actually deliver broilers to settle obligations that remain when trading ceases. The feeder cattle futures contract traded at the CME also uses cash settlement.

The 12-city price confirms actual market transactions and is considered reliable and compiled by neutral sources. The price is weighted by the sales volume in three geographic regions of four whole-chicken product categories: U.S. Grade A (including branded), plant grade, chilled pack, and whole birds without giblets. In addition, the price is weighted

Broiler Prices Show Substantial Variability



Commodity Spotlight

by the population in the three geographic regions, the East, Central, and West.

The old contract was settled only through physical delivery of "iced" broilers, which proved to be cumbersome. There was too much variety in interpretations of product quality and specifications of the product to be delivered. With so many possible variations in weight, color, and location, a fair system of settlement could not be agreed upon. Problems with settlement contributed to low trading volume and the ultimate demise of the contract.

Hedges Cut Price Risk

Trading broiler futures achieves one of two main purposes, hedging or speculation. A hedger actually deals in broilers while a speculator deals only in futures contracts. Hedging is the purchase or sale of a futures contract as a temporary offsetting substitute for a transaction to be made at a later date in the cash market.

Hedges can serve as insurance against the risk of adverse price changes. By taking opposite positions in the futures and cash markets, any loss in one market will be offset by a gain in the other. This is because cash and futures prices tend to move in the same direction and converge as the contract matures.

Hedgers usually raise broilers or are food service businesses that seek to avoid losses in their cash position from changes in price. A hedge can protect, or "lock in," a profit, from producing, processing, storing, and marketing a commodity.

Producers can sell contracts to protect against price declines while food service companies are able to buy contracts to protect against price increases. In contrast, speculators take positions in contracts hoping to profit solely from correctly anticipating changes in price.

Price Volatility Gives Impetus to Futures

Broiler prices can be volatile, presenting considerable price risk to producers and users of wholesale poultry products. And there are typically wide swings in the average 12-city weekly broiler price.

This volatility represents risks to broiler integrators and processors who previously could hedge only the costs of key feed ingredients, such as corn and soymeal. Broiler futures contracts offer a hedge to reduce broiler price risk and price fluctuations by allowing growing and processing margins to be locked in before actual physical delivery takes place.

The chicken futures contracts also are useful to commercial users who must set menu prices and plan "specials" well in advance of broiler purchases. Exporters can use futures contracts as a temporary substitute for the cash purchase or sale to lock in handling margins. Ultimately, this may allow U.S. broiler exports to be priced even more competitively on the world market. [Lee Christensen (202) 219-0714] AO



Aquaculture Expected To Grow

Seafood products represent one of the few major areas of U.S. food and agriculture with a significant trade deficit, and this deficit is expected to increase over the next decade. Growing domestic demand for seafood, stagnant landings of many wild harvest species, and the relatively slow development of many sectors of domestic aquaculture have contributed to the rising fisheries trade deficit.

Despite efforts to manage wild fish and shellfish populations for their greatest sustained yield, the U.S. is expected to go on consuming more seafood than it produces. During 1980-89, imports of edible fish products rose almost 50 percent to 3.2 billion pounds. So, while edible fishery exports more than doubled to 1.4 billion pounds, the trade deficit rose from 1.5 billion pounds to 1.8 billion.

However, domestic aquaculture will remain a growth industry. This growth also will benefit some rural areas by providing alternative crops and creating new jobs. Growth over the next decade will come from a number of sources:

- *Continued expansion of established sectors.* Their higher production will come from increases in farm size and productivity.
- *Greater efficiency through increased research.* New research will allow producers to raise stocking densities, shorten growing times, and lower mortality rates. These changes will drop per-unit growing costs and allow aquaculture to compete more effectively with landed fish.
- *Expansion to more species.* New species will allow aquacultural operations to expand into new parts of the country.

Commodity Spotlight

- Sustained demand growth due to dietary concerns.* In addition, higher consumption will be aided by the rising number of outlets actively marketing seafood. The year-round availability and stable prices of aquacultural products are distinct advantages to retail outlets.

Catfish Output Will Continue Up

Grower and hatchery inventories indicate that supplies are ample to continue expanding catfish output in 1991 and into 1992. The large increases in grower holdings of medium and small food-size fish (those that are already at harvestable size) may have placed downward pressure on grower prices in the first quarter, a time when demand traditionally peaks.

Catfish dominate U.S. aquaculture, accounting for about half of the total output, and likely will remain at the top of the industry for some time. Processed catfish production grew from 46 million pounds in 1980 to 360 million in 1990. Domestically, only the salmon, shrimp, and crab catches have a higher value.

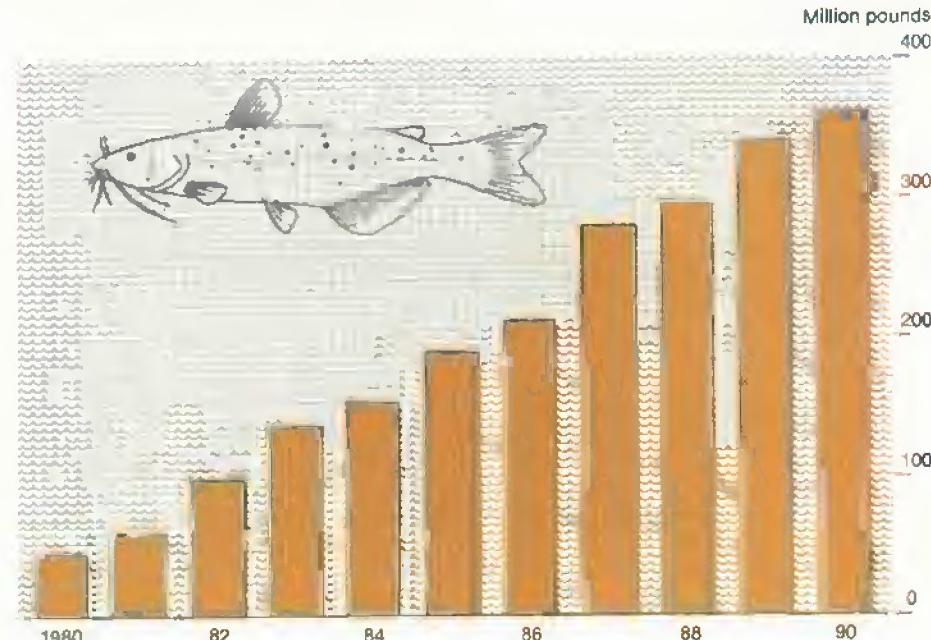
Catfish received by processing plants topped 360 million pounds in 1990, up over 5 percent from the previous year. But this was a small gain compared with the almost 16-percent jump in 1989. Last year's slower growth rate reflected lower farm and processor prices in 1989 and a labor dispute at the largest processor in 1990. Growth in 1991 is likely to be higher.

The continued growth in the catfish industry will require expanding traditional markets and developing new ones. However, developing the export market is likely to be costly.

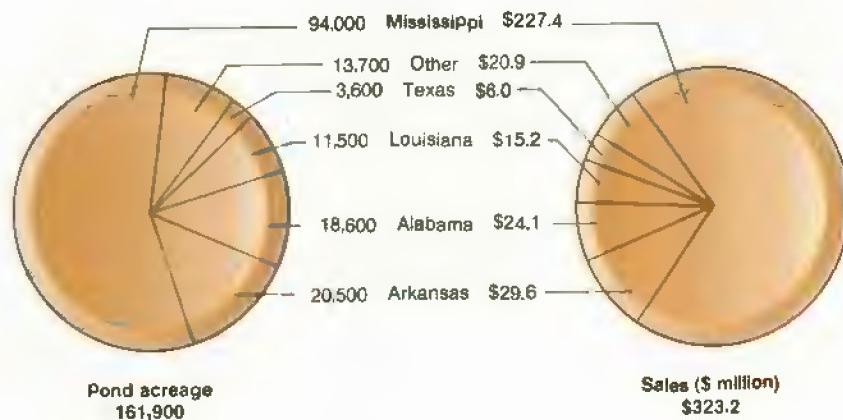
Catfish Prices To Be Flat

The average price paid by processors for farm-raised catfish in 1990 was 77.3 cents a pound (liveweight), 8 percent above a year earlier. Price increases in first-quarter 1990 were due to a pricing

Catfish Production Has Soared Since 1980



Mississippi Accounts for Over 70 Percent of U.S. Catfish Sales



1990 data.

plan developed by the Catfish Bargaining Association. The plan called for an increase in prices paid by processors. But the Association agreed to lower prices later in 1990, and prices are not expected to rise this year.

After rising 6 percent in 1990 to \$2.24 a pound, average prices for processed products are expected to remain stable in 1991. Between 1980 and 1990, average processed prices increased over 50 percent. But when adjusted for inflation, they rose only 15 percent. However,

Commodity Spotlight

increased efficiency has substantially lowered processors' production costs.

As the catfish industry has expanded over the last several years, its sales makeup also has changed. Frozen products are capturing a growing share of catfish sales. In 1990, sales of frozen products increased 10 percent. This reflects industry expansion beyond traditional markets and the growth of sales to food service and institutional outlets. Given equal quality, people in these markets prefer the longer usable life of frozen products.

Sales also are shifting away from whole products to filleted and "other" products. Sales of whole fish reached 64 million pounds in 1987, but fell to 59 million in 1990. Sales of fillets are the major beneficiary of the move away from whole fish.

Fillet sales should continue to grow with the popularity of microwaveable entrees. Also, fillets are the most familiar form for most people, and are preferred by many restaurants and hotels.

Output Growth Fastest In Texas

Water acreage devoted to catfish production on January 1, 1991, was almost 162,000 acres, up 7 percent from a year earlier. Total catfish sales (hatcheries plus growers) in 1990 jumped almost 20 percent to \$323 million, but are expected to increase at a slower rate in 1991.

Mississippi remains the largest supplier with a substantial majority of both acreage and sales. However, water acreage is growing rapidly in Alabama, Arkansas, and Louisiana. The three states averaged an 11-percent acreage increase in 1990 and are expected to grow at about the same rate in 1991.

Catfish production is also growing in new areas, such as Florida, the Carolinas, and Texas. These states substantially boosted acreage and total sales in 1990. Growth in many of these newer areas has been fueled by new processing plants and feed mills built for catfish.

Production is growing the fastest in Texas. During 1990, area there increased from 2,300 acres to over 3,600 and sales shot up from \$1.1 million to about \$6 million.

Except for large food-size fish, inventories held by catfish growers at the beginning of 1991 were well ahead of a year earlier. Most significant were the increases in the medium and small food-size categories, which rose 27 and 39 percent.

When grower and hatchery inventories are combined, the stocker inventory is up 13 percent and fingerling inventory is up 14 percent from a year earlier. Stockers are longer than 6 inches but weigh less than three-fourths of a pound. Fingerlings are less than 6 inches long.

Ending stocks of processed catfish in 1990 were 9.4 million pounds, up 15 percent from a year earlier. While this is a considerable increase, it represents only about a 20-day supply. All of the increase came in filleted and "other" products; whole fish inventories fell 19 percent. (*Dave Harvey (202) 219-0888*) **AO**

World Agriculture & Trade



Exports To Drop \$3.1 Billion

U.S. agricultural exports are expected to fall more in fiscal 1991 than forecast late last November. Export value is projected to drop slightly more than \$3 billion from a year ago to \$37 billion. This would be the first decline in nominal values since fiscal 1986. (This article is based on a quarterly forecast update released February 27. The next update will be released on May 29.)

From 1981 to 1986, U.S. agricultural exports fell more than \$17 billion. After 1986, favorable changes in exchange rates, overseas economic growth, and U.S. farm policy combined to help drive exports back up to \$40 billion.

Export volume rose from 110 million tons in 1986 to nearly 150 million in 1990. An 18-million-ton drop is forecast for fiscal 1991, the first substantial decline since 1986.

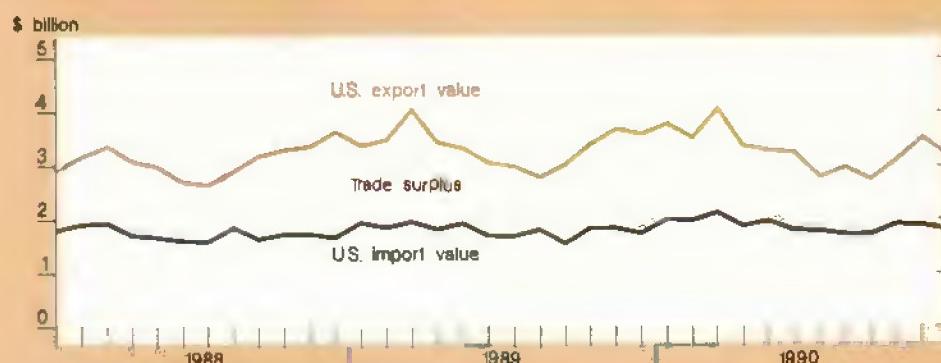
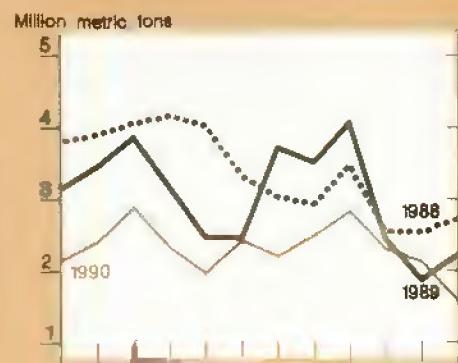
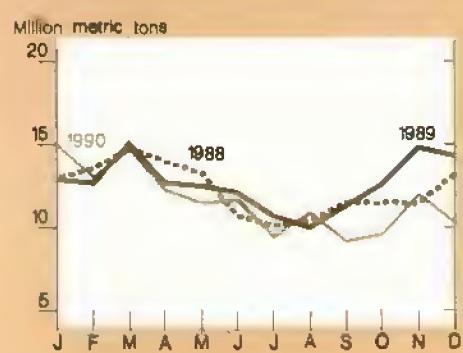
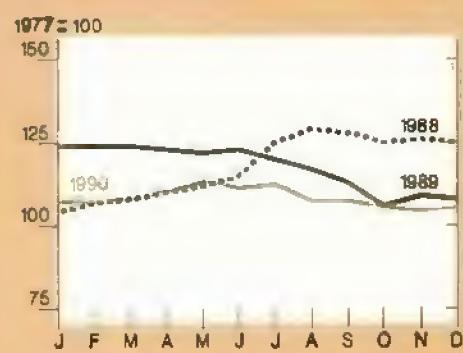
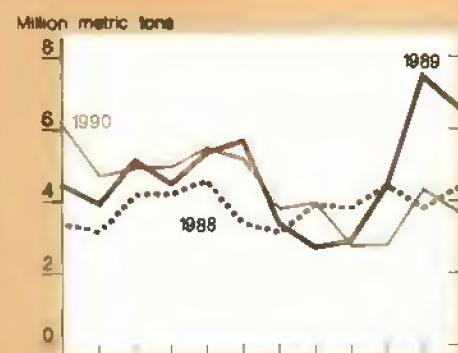
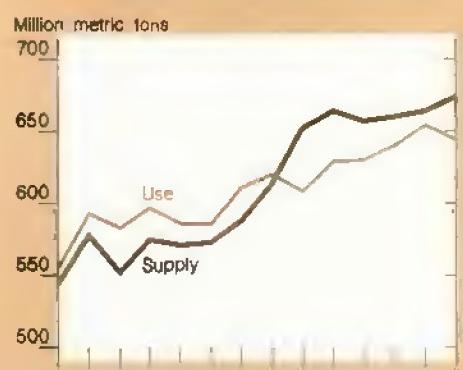
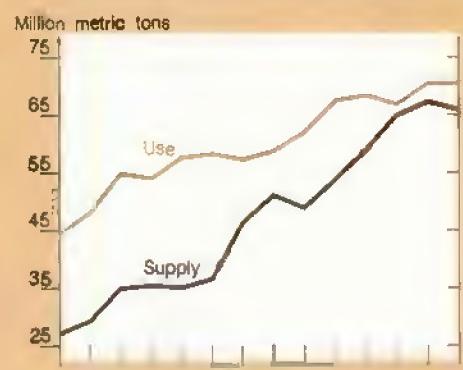
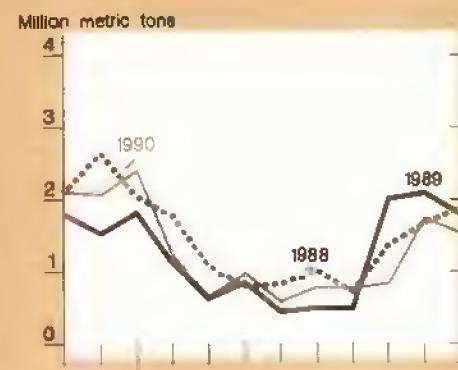
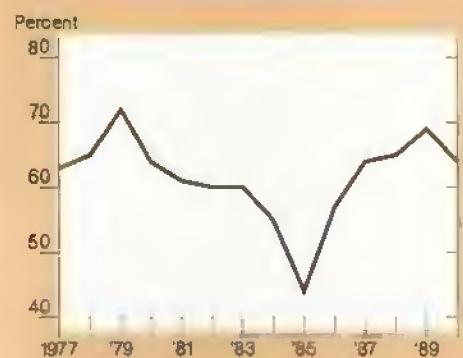
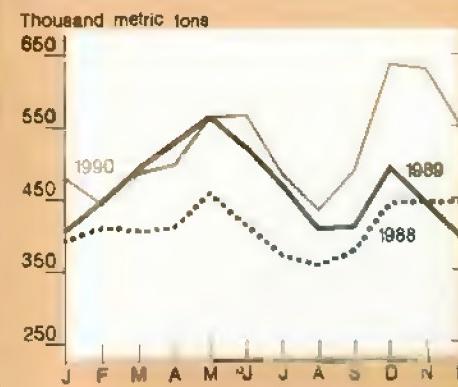
Reduced grain exports account for much of the expected decline, following record world wheat production, record grain production in China, and near-record grain output in the Soviet Union. In contrast,

U.S. Agricultural Trade Update

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U.S. Trade Indicators**World Agriculture & Trade****U.S. agricultural trade balance****U.S. wheat exports****Export volume****Index of export prices****U.S. corn exports****Foreign supply & use of coarse grains****Foreign supply & use of soybeans****U.S. soybean exports****U.S. share of world coarse grains exports^{1,2}****U.S. share of world soybean exports^{1,2}****U.S. fruit & vegetable exports³**¹Excluding intra-EC trade²October-September years.³Includes fruit juices

World Agriculture & Trade

Grains Lead the Decline in U.S. Ag Exports

Commodity	1988	1989	1990	1991
<i>\$ billion</i>				
Grains and feeds	12.7	17.1	16.0	12.6
Wheat and flour	4.6	6.3	4.4	3.0
Rice	0.7	1.0	0.8	0.7
Coarse grains	5.2	7.2	8.0	6.0
Oilseeds and products	7.8	6.8	6.3	5.6
Animal products	6.1	6.6	6.6	6.8
Horticultural products	3.8	4.1	5.2	5.6
Cotton and linters	2.2	2.1	2.7	3.0
Total	35.3	39.6	40.1	37.0

aFiscal years. 1991 forecast.

exports of high-value products are forecast to reach a record in fiscal 1991. High-value exports will be lifted by continued strong economic growth in some major markets and the historically low value of the dollar.

U.S. agricultural imports are forecast to reach \$22.5 billion, up \$500 million from the November estimate but unchanged from a year earlier. With lower exports, and imports unchanged from a year ago, the U.S. agricultural trade surplus is forecast to fall \$3 billion from a year earlier to \$14.5 billion.

Part of the drop in exports is due to the diminishing effects of the 1988 North American drought, which raised world prices and lifted export values in fiscal 1989 and 1990. Reduced grain output in key countries helped sustain U.S. export volume despite higher prices in 1989. And in 1990, continued record Soviet imports of U.S. corn sustained volume for another year, drawing down U.S. stocks.

During fiscal 1991, conditions are expected to be less favorable. With U.S. wheat production largely recovered from the drought, foreign wheat output at a record 514 million tons, and coarse grain output higher for the second consecutive year, grain prices are falling. Wheat prices especially are expected to be substantially lower during fiscal 1991 than a year earlier.

Wheat & Coarse Grain Exports Are Down

After reaching \$17 and \$16 billion in fiscal 1989 and 1990, U.S. grain exports are expected to fall to \$12.6 billion in 1991. The decline includes drops in wheat, coarse grains, and rice. While rice exports are expected to fall only \$100 million from a year ago, wheat exports may slide \$1.4 billion, and coarse grains, \$2 billion. This represents a decline in wheat and coarse grain exports of 30 and 25 percent from a year earlier.

Sharply lower world wheat prices are not only reducing the value of U.S. wheat exports, but they also are indirectly reducing U.S. coarse grain exports as producers globally find it economical to use wheat for livestock feed. Lower prices are due to the record to near-record output in many countries. Foreign wheat production in 1990/91 is up an estimated 63 million tons from 2 years earlier, and foreign coarse grain output is up 14 million.

In fiscal 1991, U.S. wheat exports are forecast to fall 1.5 million tons to 26.5 million. However, coarse grain exports are expected to slip a little more than 14 million tons to 55 million. Much of the expected decline in the value of wheat exports is due to lower prices, while lower volume accounts for most of coarse grains' drop.

And the sharp rise in wheat output around the world means increased global wheat stocks. Coarse grain stocks will drop slightly. So the average price of U.S. coarse grain exports will fall only

about \$5 per ton during fiscal 1991 while the average price of wheat will drop roughly \$45 per ton. With world price changes favoring wheat consumption, global use of wheat as livestock feed is expected to continue rising, cutting U.S. corn exports.

China & the USSR To Import Less Grain

Record grain production in China and near-record production in the Soviet Union in 1990/91 have weakened the outlook for U.S. sales. Among U.S. customers, the Soviet Union will reduce grain purchases the most due to lower prices and sharply lower Soviet corn imports. Soviet imports are expected to fall by \$1.4 billion to \$1.6 billion.

Coarse grains are likely to account for much of the expected decline in U.S. sales to the Soviets. Several factors explain this expected decline: A near-record Soviet grain crop, prices that favor wheat imports over U.S. corn, and Soviet foreign exchange constraints.

U.S. corn exports to the Soviet Union were a near-record and record in 1989 and 1990. A poor Soviet crop and low production in foreign exporting countries boosted U.S. exports in fiscal 1989. In 1990, U.S. corn exports remained strong despite increased Soviet production, largely due to increasing problems the Soviet government had in obtaining output from their producers.

China's record grain crop is adversely affecting U.S. exports to other Asian markets. In Korea, increased Chinese coarse grain sales and increased feeding of wheat to livestock are expected to cut U.S. sales by \$400 million from 1990's record \$2.7 billion.

Increased U.S. cotton exports to China are expected to offset some of the lost grain sales there. China will account for much of the \$300-million gain expected for U.S. cotton exports in fiscal 1991. The value of total U.S. agricultural exports to China is expected to fall by \$200 million to \$700 million.

U.S. oilseed and product exports are forecast to drop \$700 million from a year ago in fiscal 1991. And the volume of U.S. soybean and meal exports is dropping as well. World oilseed markets are experiencing many of the same conditions as the grain markets. Global soybean and meal trade volume is expected to fall, prices are lower for meal, and the U.S. share of world trade is likely to shrink.

Some Exports Are Moving Up

On the other hand, U.S. cotton exports are rising under market conditions almost exactly opposite those facing grains and oilseeds. Prices are up, world trade is higher, and the U.S. share of trade is greater than a year earlier. U.S. cotton exports are expected to reach \$3 billion in fiscal 1991, up \$300 million from a year earlier, and matching 1980's record. Much of the U.S. gain is due to a lack of exportable foreign supplies.

Since the mid-1980's, the three major U.S. competitors have not kept pace with growing world demand. Pakistan has almost doubled its cotton consumption in the last 5 years while its output stagnated. China's production dropped just as its consumption was taking off. And cotton output in the Soviet Union has been flat.

U.S. exports of animal products are climbing from \$6.6 billion in fiscal 1990 to \$6.8 billion. Part of the gain represents a return to pre-1989 conditions. Dairy product exports fell in 1990 because Commodity Credit Corporation (CCC) stocks used in food aid and other government-assisted exports had been depleted. Nonfat dried milk exports fell to \$20 million from \$145 million a year earlier.

CCC stocks of dairy products fell in 1989 and 1990 as higher prices encouraged producers to sell to other buyers. And there were even commercial exports to the EC in 1989, an atypical trade pattern. But during 1990, prices plummeted and the CCC began acquiring stocks again. Increased government stocks will enable food aid shipments of dairy prod-

ucts and other government-assisted exports to rise in 1991.

Horticultural exports are likely to reach a record \$5.6 billion in fiscal 1991, up \$400 million from a year ago. Continued strong demand from Canada, the EC, and East Asian markets are major factors behind this growth. However, some of the expected gain stems from revised U.S. procedures for collecting data on U.S. exports to Canada.

Prior to January 1991, the U.S. used export data to report trade with Canada. These data undercounted shipments to Canada, and horticultural exports were particularly affected. Now that Canadian import data have been substituted for U.S. export data, no undercounting is expected. The previous undercounting makes 1991's growth appear higher than actual shipments indicate, particularly compared with fiscal 1989, when undercounting was at its greatest.

[Stephen MacDonald (202) 219-0822] AO

EC Policy: Reform or Tinker?

In late January, the EC Commission approved a "Reflections Paper" proposing major reform of the Common Agricultural Policy (CAP). The proposal called for sharp cuts in price supports, reduced production quotas, direct income aid to farmers, and increased land set-asides. Under the plan, large farms would receive less direct income aid and face stricter land set-aside requirements than small farms.

A number of EC agriculture ministers objected strongly to the Commission's CAP reform proposals. So, in late February, the Commission decided to assemble a 1991/92 price package with only minor overall adjustments.

Still, a majority of the Community's farm ministers strongly opposed the price package because they claimed the price cuts were too large. The Com-

mission's fundamental reforms are now scheduled to be debated this summer after the annual price package has been wrapped up. The outcome of the price package and the resolution of the CAP reform debate should show how far the EC is willing to go at the GATT talks.

Reforms Would Slash Support Prices

In the Reflections Paper on CAP reform, the Commission noted that the EC's post-World War II goal of food self-sufficiency has been surpassed. It also stated that incremental changes to the CAP in 1973, 1978, 1984-86, and 1988 failed to curb supplies, raise farm incomes, or contain budget costs. So the paper called for serious CAP reform.

The paper also reported that the CAP has tended to widen disparities among farmers: 6 percent of the EC's grain farms now account for 50 percent of grain land and 60 percent of the production; 15 percent of the dairy farms produce 50 percent of the milk; 10 percent of the beef farms produce 50 percent of the beef; and 80 percent of the farm budget goes to 20 percent of the farm operators.

The Commission paper said that "...the mechanisms of the CAP as currently applied are no longer in a position to attain certain objectives prescribed for the agricultural policy under Article 39 of the Treaty of Rome, namely to ensure a fair standard of living for the agricultural Community, stabilize markets, ensure reasonable prices to consumers, [and] take account of the social structure of agriculture and of the structural and natural disparities between the various agricultural regions."

The EC Commission's Agricultural Directorate put together a draft package of radical reforms last December. These reform proposals included: cutting support prices for grains 47 percent to 90 ECU (\$122) per metric ton, cutting oilseed support prices by an equivalent amount, and cutting 15 percent from beef and 10 percent from milk price supports. Milk quotas would have been cut 5 percent. The tobacco and sugar sectors

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would also have been reformed on a comparable basis.

Farmers with up to 30 hectares (74 acres) would have been fully compensated through direct income payments and would not have had to set aside land. For larger farms, a progressive scale would have determined how much land to set aside in order to collect direct income payments. The average EC farm is 17 hectares (42 acres), compared with 186 hectares in the U.S.

The paper further recommended measures to encourage environmentally sound farming practices and increased payments to farmers leaving the land. It did not specifically mention changes in border protections or export subsidies.

Specifics Were Removed & Debate Postponed

By the time the EC Commission met with the farm ministers on January 20 to formally unveil the proposal, these detailed cuts had been eliminated. The thrust of the reform package remained, though somewhat blunted.

Farm ministers of the UK, the Netherlands, and Denmark have voiced strong opposition to the proposed reforms. The three countries have some of the EC's largest and most efficient farms, and the ministers said that such reforms would discriminate against the biggest producers, thereby reducing the EC's ability to compete on world markets.

France's minister, reflecting his country's mix of efficient and marginal farms, had mixed views on the proposal, and was more critical of details than principles. Farm ministers from Germany, Ireland, and the Mediterranean countries substantially agreed with the reform proposal because it would protect their many small and part-time farmers.

However, the main EC farm organizations attacked the proposal as misguided. They said that price policy must remain the primary means of income support for farmers. And the groups want social-structural measures to maintain family farms and preserve the environment.

The EC's farm ministers met on February 4 to debate the proposed reforms but refused to endorse the proposal. EC Agriculture Commissioner Ray MacSharry was asked instead to prepare something that would provide the basis for this year's farm price package (akin to the U.S. farm bill, but done annually).

EC Considers A Modest Price Package

The EC Commission issued its proposed package of price supports and related measures for the 1991/92 marketing year on March 1. Expressing the desire to keep the price package debate from affecting the debate on CAP reform, the Commission proposed a basic carryover of 1990/91 policy measures with some adjustments for those sectors with the most pressing surpluses.

According to the Commission, the market situation for EC farm output deteriorated rapidly during 1990 and into 1991. EC commodity surpluses and budgetary pressures returned after a couple of years of reprieve. By the end of January, intervention grain stocks totaled 16.1 million tons (18.6 million tons, if amounts under offer are included), beef stocks exceeded 700,000 tons, and butter and skim milk powder stocks grew to 253,000 tons and 333,000 tons.

While the Commission noted that stocks from farmers in what used to be East Germany lifted the EC's stocks, it acknowledged that the major problem continues to be that production outstrips demand.

Burgeoning output is putting pressure on the EC's agricultural budget. The Commission estimates that unless corrective measures are taken, agricultural support in 1991 will rise by almost a third to a record 33.4 billion ECU (\$43.4 billion), with another substantial increase likely in 1992.

This would push agricultural support spending 880 million ECU above the budgetary guideline of 32.5 billion ECU set for 1991. The guideline, which was established in 1988, limits growth in agricultural support spending to 74 percent of the growth in the EC's gross domestic

product adjusted for inflation. The guideline cannot be breached unless the Council passes legislation authorizing such action.

To remedy the budgetary crisis in the short term, the Commission proposed certain corrective measures for the 1991/92 price package. For cereals, the biggest changes are a 7-percent cut in the support price for durum wheat, a doubling of the coreponsibility levy (for sales off farm) to 6 percent, and an exemption from the levy for farmers taking 15 percent of their land out of production in 1992.

For oilseeds and protein crops, the package would cut support prices 3 percent, eliminate the quality bonus and monthly increments for peas and field beans, eliminate the premium for double-low rapeseed, and cut the aid for dried fodder by 20 percent. For sugar, the Commission proposed a 5-percent cut in the basic sugar beet price and in the white sugar intervention price.

The milk quota would be cut 2 percent, and butter purchases would begin at 92 percent of the intervention price. For beef, intervention and "safety net" provisions would be merged. Beef intervention purchases would be triggered when the average EC price fell below 80 percent of the intervention price, and would be made only in regions where prices were below 76 percent of intervention. The ceiling on beef purchases would be removed.

For lamb and mutton, a 2-percent cut in the support price would be offset in less favored regions by an increase in the ewe premium from 4 ECU to 5.5 ECU per head.

Tobacco support prices and premiums would be cut 10 percent on average, depending on the variety. Wine support prices would be maintained, but the support distillation price would be dropped from the current 82 percent of the guide price to 70 percent.

The price package calls for some changes in the Agrimonetary system. These would be in line with a policy established in 1988 to reduce or

GATT Talks To Resume

A group of key GATT participants, including the U.S. and the EC, met in Geneva in late February and signed an agreement pledging to negotiate "specific binding commitments" in each of the three areas of agricultural support: internal support, import protection, and export subsidies. The agreement will allow the formal trade negotiations to resume by ending the deadlock over agricultural trade reform.

At a meeting of trade and agricultural ministers that was to have marked the end of the Uruguay Round, the EC rejected a compromise proposal that would have required it to reduce export subsidies or the volume exported with subsidies. The EC's reluctance to negotiate separate commitments on export subsidies contributed to the breakdown of the trade talks in December.

The U.S. and other participants said they would not resume the talks unless the EC demonstrated a commitment to agricultural trade reform. The agreement reached in late February

provided evidence of the EC's commitment to proceed on agricultural reform, as well as sufficient evidence of progress in the talks to allow U.S. negotiators to ask Congress for an extension of the "fast-track" negotiating authority.

U.S. fast-track negotiating authority will expire on May 31, 1991. Under the fast-track provision, Congress must approve or disapprove any agreement presented to it without amendment. Fast-track authority is critical to successfully completing a trade agreement, which involves a carefully negotiated balance of tradeoffs among participants.

Without the fast-track authority, any agreement reached in the GATT would be subject to amendments during the Congressional approval process that could unravel the entire agreement. President Bush sent a formal request for a 2-year extension to Congress on March 1.

Congress has 3 months to consider the request. If approved, the extension would provide fast-track negotiating authority for both the Uruguay Round trade talks and the proposed U.S.-Mexico free trade agreement. [Mary Anne Normile (202) 219-0610]

eliminate monetary gaps between member countries (the differences between market exchange rates and special "green" agricultural exchange rates). Removing the gaps would further the EC's goal of harmonizing support prices across member state borders.

Little Impact Is Expected

According to the Commission's estimates, the net effect of the price proposal across the 12 member countries would be a 0.2-percent cut in support prices in ECU terms, ranging from a 0.8-percent cut in Italy to a 1.5-percent rise in Spain. After converting the support prices into national currencies at green rates, support prices on average would decline 0.1 percent in 1991/92, ranging from a 0.8-

percent decline in Italy to a 3.1-percent increase in Greece.

Moreover, these proposed measures are not expected to curb the EC's surpluses. Farmers will boost yields and bypass the higher grain levy by feeding more of their own grain to their own livestock.

In terms of the budget, the Commission's price package proposal would mean savings of 540 million ECU in 1991 because of the lower proposed support prices. Separate measures, including a carryover of 648 million ECU in credits from the 1990/91 budget and a "supplementary budget" equal to the budget shortfall, also will be necessary to keep 1991 accounts within the agricultural guideline, according to the Commission's document.

Agriculture Commissioner MacSharry noted that the proposed 1991/92 package was designed to deal with the current budget crisis and commodity surpluses. The more radical policy reform proposals that drew the wrath of the EC farm ministers in February have been put on hold until this year's price package has been wrapped up.

The Commission has requested that the Council move on the price package by the end of April. The debate over the proposed price cuts and related measures is expected to be lively, and may be a prelude to the upcoming CAP reform talks expected this summer. [Walter H. Gardiner (202) 219-0610 and Katherine C. Nishiura (202) 382-1329] AO

U.S. Has A Competitive Edge

Abundant fertile land helps give U.S. farmers the edge in some agricultural commodities and helps explain the general pattern of U.S. agricultural trade. A fundamental theory of international trade asserts that a nation has a comparative advantage in exporting those goods that intensively use its abundant resources over goods that intensively use its scarce resources.

Research shows that U.S. agricultural exports are more land intensive than its imports. Crops with high land-to-output requirements such as wheat, corn, and soybeans figure prominently in the nation's agricultural exports but not in its imports. The research is based on data from 1987, the most recently available with the required level of detail, and excludes U.S. trade in noncompetitive items like bananas and coffee.

Each \$1 million of agricultural exports used some 3,500 harvested acres, compared with less than 800 acres for agricultural imports. U.S. agricultural exports used some 118 harvested acres per worker, compared with 26 acres per worker for its agricultural imports.

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So What?

Because low-income nations, as well as the USSR, tend to import land-intensive products, efforts that address developing nations' debt burdens and other economic problems are likely to lead these nations to increase their imports of land-intensive goods. If these markets grow, U.S. producers probably would supply a large share of those purchases.

The land intensity of U.S. agricultural exports to major customers differs. Varying endowments of land across trading partners account for much of this difference. For example, U.S. agricultural exports to land-scarce Japan and Western Europe used more than 100 harvested acres per worker. In contrast, exports to land-abundant Canada and Australia used under 50 acres per worker.

Because the estimates of factor intensities are based on data measuring actual trade flows, they include the distortions caused by trade barriers. These distortions affect the size but probably not the direction of the estimates.

The land intensity of U.S. agricultural trade also underscores current attempts

to promote freer agricultural trade. U.S. agricultural exports provide an outlet for the productive capacity of the nation's farmland. In the long run, freer agricultural trade would allow U.S. farmers to benefit more fully from this advantage, bolstering land values and farm incomes.

Factor intensity is a measure of the factors of production used (land, labor, and capital) to produce a unit of output. U.S. agricultural exports totaled \$29 billion in calendar 1987. An estimated 107 million harvested acres were used to produce those exports, comprising more than one-third of total harvested acreage that year.

U.S. agricultural exports to Japan alone used nearly 19 million harvested acres. Exports to Western Europe used about 20 million acres. Sales to the Soviet Union and Mexico used 6.8 million and 4.4 million acres.

Exports of raw farm products accounted for the bulk of the harvested acreage used for exports. Food grains, feed grains, and oil crops used more than three-fourths of the acres used for producing U.S. agricultural exports. Exports of processed agricultural products, however, also used significant amounts of land. For example, feed and

flour products accounted for more than 4 million acres and vegetable fats and oils nearly 5 million acres.

Some 884,000 U.S. workers were used to produce U.S. agricultural exports in 1987. About 40 percent were farm workers and 7 percent were in agricultural services. Workers in food processing industries represented another 6 percent of the total.

Much of the supporting labor demand, however, occurred outside agriculturally related industries. For example, about 19 percent worked in the transportation and trade industries, moving agricultural products and the inputs required to produce them through the various stages of production and distribution. Another 28 percent worked in other industries throughout the economy, such as petroleum refining and container manufacturing.

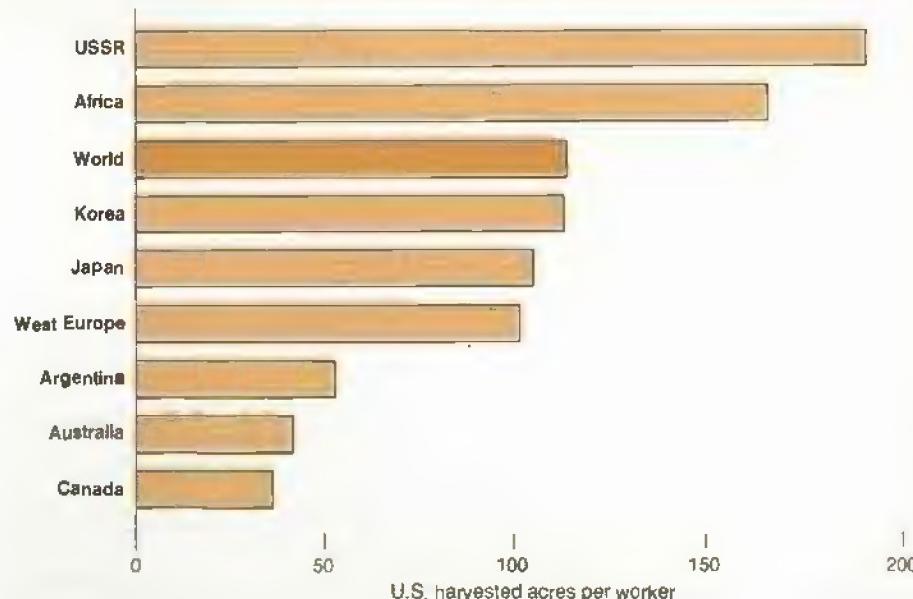
Sales to Canada Use Less Land

The amount of cropland needed for agricultural exports depends on the volume and composition of those exports. For example, U.S. agricultural exports to Canada and South Korea in 1987 each totaled \$1.8 billion. However, exports to South Korea used more than 7 million harvested acres, compared with less than 2 million for Canada.

Food grains, feed grains, and oil crops—all crops that use land intensively—were prominent among exports to South Korea. Exports to Canada, however, were largely vegetables, fruits, and nuts—crops that are less land intensive and have higher values.

Moreover, the volume and composition of exports depend largely on the income levels and resource endowments of customer nations. As a nation's income rises, it spends a smaller share on bulk food products. And at low income levels, a country is likely to spend a large share of its food bill on food grains, such as rice and wheat. High-income nations also spend a larger share of the food budget on high-value products, such

U.S. Exports Land-Intensive Goods to Low-Income Countries



1987 data.

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as fruits and vegetables, meat products, and other processed foods.

These consumption patterns are reflected in U.S. exports. For example, in 1987 food grains made up 40 percent of U.S. agricultural exports to Africa, 12 percent of agricultural exports to South Korea, and only 1 percent of those to Western Europe. In contrast, exports of vegetables, fruits, and nuts comprised less than 2 percent of U.S. agricultural exports to Africa, compared with 8 percent of those to Western Europe.

South Korea shows how consumption changes as per capita income rises. Between 1977 and 1987, food grain imports fell from 22 to 12 percent of total agricultural imports from the U.S., while meat imports rose from 12 to 33 percent. [Chinkook Lee (202) 219-0785 and Darryl Wills (617) 451-5491] **AO**

About the Model...

An input-output model of the U.S. economy was used to estimate the factor intensity of U.S. agricultural trade. The model traces the intermediate flows of goods and services between industries that support the final production of agricultural exports. Using trade data from USDA and information on land, labor, and capital used by each industry in the economy, the model provides estimates of the amount of each factor used to produce agricultural exports.

The same model was used to estimate the factor intensity of U.S. agricultural imports, as if those products had been domestically produced.

Because the model captures the flows of intermediate products between industries, the farm commodity content of a processed agricultural product can be estimated along with the acreage used to produce it. The analysis also reflects the technology and transportation system that existed in 1987. The detailed analysis is in *Factor Intensity of U.S. Agricultural Trade*, Agricultural Economic Report Number 637, USDA-ERS.

Farm Finance



Farm Income To Drop In 1991

Farmers' net incomes are forecast to drop in 1991 from recent records. Cash receipts are expected to remain near record levels, but slightly lower direct government payments and higher farm expenses will pull down net incomes.

Net cash income is forecast to be \$53-\$58 billion in 1991, compared with \$58 billion estimated for 1990. Net farm income is forecast to be \$42-\$47 billion, nearly one-tenth below a year earlier.

Earlier estimates of net cash income for 1990 were lowered by \$1 billion because receipts were lower than expected. The \$49-billion estimate of 1990's net farm income did not change, however.

Net farm income measures the value of production plus government payments less all costs in a calendar year, while net cash income reflects commodities sold in a calendar year plus government payments less out-of-pocket costs. Net farm income includes some noncash revenue and expense items such as the value of unsold commodities, the imputed rental

value of owner-occupied housing, and depreciation.

Expenses Down From Earlier Forecasts

Although farm expenses are expected to be up 2 percent from 1990, the total, at \$146-\$151 billion, is down about \$3 billion from prior forecasts. Prices of some production items, most notably fuels, as well as farm wage rates and interest rates, are expected to be lower in 1991 than previously anticipated. In addition, feed prices have been drifting downward and the feed price index is likely to be the lowest since 1987.

Crude oil prices have fallen sharply since January, and are now expected to average \$21.50 per barrel during 1991, rather than \$28 as previously assumed.

Combined with expectations of only minimal changes in planted area, the forecast for fuel and oil expenses was lowered by \$600 million from earlier forecasts. Because fuel prices and acreage of major crops are now projected to be about the same as a year ago, outlays for fuel, as well as for fertilizer and pesticides, are not likely to increase more than 1-2 percent from a year ago.

Recent declines in market interest rates were reflected in a 4-percent drop in the index of prices paid for interest. However, interest expense forecasts for 1991 are only slightly lower (\$200 million) than prior forecasts because the average effective interest rate on outstanding debt changes more slowly than market rates. In addition, the expected index value of farm wage rates came down 3 percentage points from earlier forecasts and is now the same as in 1990.

The value of the change in inventory for 1990 rose \$1 billion from prior forecasts. The increase was due to preliminary, state-level sales data indicating that the proportion of both corn and soybeans harvested in the fall and marketed before the end of 1990 was lower than expected.

Thus, more production probably remained in inventory, increasing 1990 noncash income. As a result, net farm

Farm Finance

income for 1990 was \$49 billion, 5 percent above 1989.

Record Cash Receipts In 1990 and 1991

Commodity receipts are forecast to total \$165-\$170 billion in 1991, near the record \$167 billion estimated for 1990. However, this forecast is down from the first projections released in November.

Crop sales are forecast to be \$77-\$81 billion, compared with \$78 billion in 1990. But livestock sales are expected to be down about 2 percent from the \$89 billion estimated for 1990.

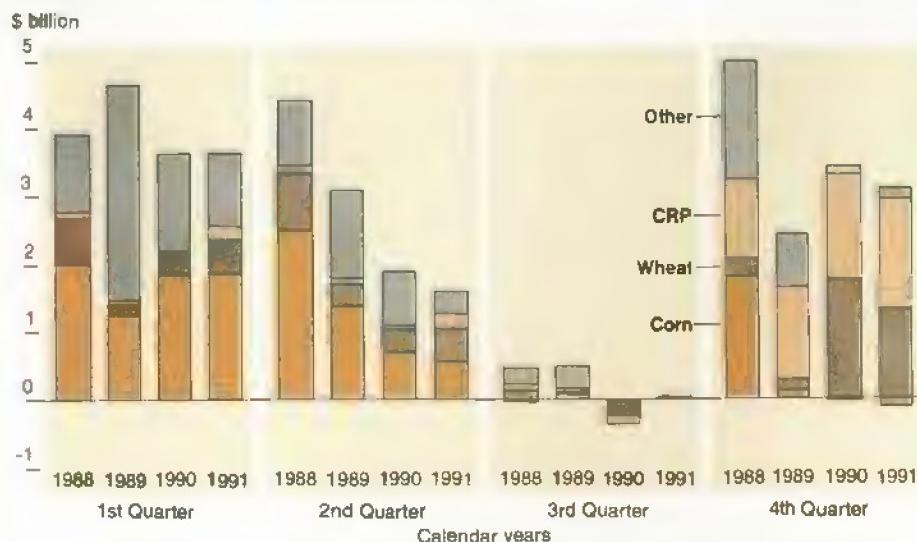
Cattle prices for 1991 are forecast to average \$75 per cwt, about the same as a year ago. With production increasing 2 percent, cash receipts are likely to be no more than 2 percent greater than a year ago. Hog receipts are expected to be slightly lower in 1991, as a 3-percent price decline is partially offset by a 2-percent rise in marketings.

Receipts for all poultry and eggs are projected to be up 5 percent from 1990. Average prices for broilers and turkeys are forecast down 1-2 percent, with production gaining 5-6 percent. Cash receipts for dairy products are expected to drop 10-15 percent in 1991, as increased production puts downward pressure on milk prices.

Demand for cash grains has weakened in the last few months as exports and livestock inventories failed to meet expectations. However, feed grain receipts are still likely to climb 5-10 percent from 1990. While soybean receipts are projected to be about the same as a year ago, wheat receipts are likely to fall more than 20 percent, slipping below \$6 billion for the first time in 3 years.

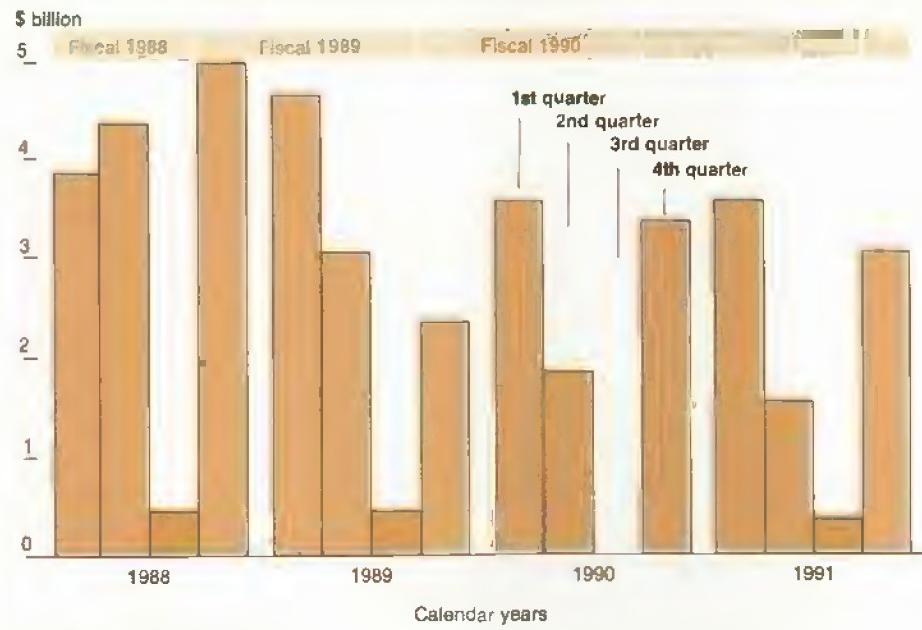
Price forecasts for wheat, corn, and soybeans have dropped in the past several months. Last fall, wheat and soybean prices expected in calendar 1991 averaged 10 percent higher than current forecasts. Corn prices are now averaging nearly 10 cents less than in October. And corn prices are likely to average

Size and Timing of Government Payments Reflect Changing Market Conditions and Programs



1990 estimated, 1991 forecast. "Other" is primarily disaster payments and deficiency payments for other commodities. In third-quarter 1990, refunds of overpayments were greater than payments disbursed, so farmers actually refunded more than the government paid out.

Government Payments Are Smallest in the Third Quarter



1990 estimated, 1991 forecast

\$2.30 per bushel for 1991 compared with \$2.40 last year.

Since the December freeze in California, the fruit price index has risen over 8 percent and output has declined 3 percent. For the year, the price index is forecast to be 7 percent above 1990, and fruit

cash receipts also are expected to increase 7 percent.

Crop receipts for 1990 rose \$1 billion from prior estimates, and probably reached \$78 billion, up 3-4 percent from 1989. Preliminary estimates show that 1990 livestock receipts totaled \$89 bil-

Farm Finance

lion, \$2 billion less than previously expected, but 6 percent higher than a year earlier.

Direct Payments To Drop in 1991

Direct government payments in 1991 are forecast down about 5 percent from a year earlier. In 1990, payments probably dropped 15 percent (\$1.5 billion).

Total direct payments to farmers, plus net Commodity Credit Corporation (CCC) loans, are likely to rise to 5 percent of gross cash income in 1991. After peaking at just over 10 percent of gross cash income in 1987, direct payments plus net CCC loans dropped annually, reaching 4 percent in 1990.

The first forecasts of direct payments that incorporated provisions of the 1990 farm bill and budget legislation were presented last fall. Since then, grain prices have generally declined, and projected deficiency payments have risen \$500 million. Projected deficiency payments for wheat and corn are up 8-10 percent from the first forecasts.

Lower grain prices imply higher deficiency payments for two reasons—higher participation rates and higher payment rates. Farmers are more likely to sign up for the commodity programs when the benefits of income protection outweigh the perceived cost of planting restrictions. Payment rates increase as the gap between target and market prices widens.

Advance payment rates for the 1991 programs have been announced, but enrollment is not yet complete, so the actual participation rates are unknown. The 1991 payment projections are based on an assumed, overall participation rate of nearly 80 percent, about the same as last year, and will decrease if participation rates are lower.

Program participation for 1991 is more difficult to gauge than usual, in part because of uncertainty about farmers' responses to provisions of the new farm act. Incentives to participate are mixed: lower market prices and increased plant-

ing flexibility encourage participation, but the reduction in payment acres and, for some crops, increased Acreage Reduction Program requirements discourage participation.

Government Payments Are Lowest in Third Quarter

Total payments are frequently reported for a fiscal year, and therefore do not correspond to calendar year income measures. Total direct payments received in each quarter for the last 3 years, plus projections for 1991, are shown in the accompanying graphs.

In the fourth quarter of the calendar year (the first quarter of the next fiscal year), payments varied from \$5 billion in 1988 to \$2.5 billion in 1989. This variation tends to obscure any systematic relationship between calendar and fiscal year accounting.

Major sources of variability in the fourth quarter have been 5-month wheat payments (over 75 percent of total wheat payments in 1990), and 12-month corn payments (30 percent of total corn payments in 1988). Conservation Reserve Program (CRP) payments have had a stabilizing effect on fourth-quarter payments. Over 80 percent of CRP payments in the last 3 years have been made in the fourth quarter.

Not only have CRP payments largely been confined to a single quarter, they have been much less variable than deficiency payments. Disaster payments can contribute to variability in any quarter because they relate to random events. Disaster payments were 25 percent of total payments in the fourth quarter of 1988 and nearly 35 percent of the total in the first quarter of 1989.

During the last 3 years, payments have been lowest in the third calendar quarter. In 1990, refunds of overpayments were greater than payments disbursed in the third quarter, so farmers actually refunded more than the government paid out. [Diane Bertelsen (202) 219-0807] AO

General Economy



Recession Continues

Declines in general economic activity are cutting demand for some agricultural products. U.S. national output has declined since the recession began in the second half of 1990. The recession probably will extend through much of the first half of this year.

While there are significant costs associated with the recession, benefits likely will include reduced inflation and lower interest rates. Also, the currently low exchange value of the dollar should promote U.S. exports and reduce the severity of the downturn. The dollar is down nearly 50 percent from its 1985 peak.

Uncertainty about future economic growth eased somewhat with the successful end of Operation Desert Storm. This should promote more stable oil prices and bolster consumer confidence. These factors should keep the recession mild and reduce its negative effects on U.S. farmers.

While there are risks the recession will deepen, most forecasters believe it will be mild by historical standards. The Administration's forecast and the consensus of a recent survey of private-sector

General Economy

economists suggest that real GNP will fall just over 1 percent from the peak late last summer to a trough in the middle of this year. This expected decline is smaller than the average decline of over 3 percent during the past three recessions.

The risks of a deeper recession come from the financial side of the economy. Specifically, the risks increase if credit restrictions tighten, if bank and S&L failures heighten financial instability, or if the currently high corporate and consumer debt burdens trigger a large increase in loan defaults.

If crude oil prices, inflation, and interest rates remain low, farm production expenses will be kept down. However, recessions and slow growth in other countries will constrain U.S. agricultural exports. Even so, lower interest rates, softening inflation pressures, and a low value of the dollar should help keep exports competitive.

As the recession ends and the recovery starts, interest rates and the value of the dollar could be pushed up. This would increase farming costs and pressure exports.

Declines Are Widespread

Statistics revealing the downturn continue to be released. The revised estimate for real Gross National Product (GNP) showed that the economy shrank at an annual rate of 2 percent in the fourth quarter of last year. Extreme weakness at the end of the year pulled real growth for all of 1990 down to 0.9 percent, compared with 2.5 percent in 1989 and 4.5 percent in 1988.

Weakness in the economy during the last quarter of 1990 was spread across various sectors. Interest- and credit-sensitive spending was particularly hard hit. Real consumption spending fell 2.9 percent at an annual rate, and investment dropped 9.2 percent. Declines in business inventories accounted for two-thirds of the drop in investment. Inventories usually drop sharply during recessions.

Labor markets also felt the impact of the recession as civilian employment fell by 1.2 million jobs between last June and February, and the civilian unemployment rate rose from 5.3 to 6.5 percent. A significant decline in manufacturing activity led to a 4-percent dropoff in industrial production. Capacity utilization fell from 84 to 79 percent.

The economy's performance in the first quarter of 1991 probably was quite weak. In January, inflation-adjusted personal disposable income fell 0.9 percent and inflation-adjusted consumption expenditures fell 1.1 percent. People mostly cut their purchases of durable goods, especially automobiles.

Investment in new homes continued to drop in January—housing starts fell to 850,000 units at an annual rate—the lowest since the 1981-82 recession. In February, though, housing starts rebounded to 989,000 units.

Economic Calm After Desert Storm?

The recession followed several years of relatively tight monetary policy. The Federal Reserve had been concentrating on reducing inflationary pressures. Credit constraints, high debt levels, and the uncertainties surrounding the Persian Gulf situation also significantly contributed to the weakness in the general economy.

Since last August, the Persian Gulf situation and the price of oil have been key factors affecting inflation, interest rates, and the general economic outlook. Crude oil prices surged from about \$17 per barrel in July to more than \$35 at one point in November.

Inflation, measured by the change in the Consumer Price Index (CPI) over the previous year, jumped from 4.8 percent in July to 6.3 percent in October. Yields on long-term U.S. Treasury bonds increased from less than 8.5 percent in July to nearly 8.9 percent in September.

Many of these problems have diminished. From November to mid-January, crude oil prices drifted down to about

\$30 per barrel. After the outbreak of war and Operation Desert Storm, oil prices defied many experts' pre-war predictions of dramatic increases and fell below \$20. By the middle of February, long-term U.S. Treasury bonds fell below 8 percent. And a military victory led to an informal cease-fire, bolstering consumer confidence.

Inflation pressures remain somewhat stubborn, though. Despite lower crude oil prices and a weak economy, the CPI advanced about 5.3 percent in February from a year earlier. The underlying rate of inflation over the past year—based on the CPI excluding food and energy prices—was also a relatively high 5.6 percent in February.

While federal excise taxes on alcohol and cigarettes implemented on January 1 accounted for some of the continued inflation, service price inflation has been particularly intractable, rising 6.3 percent over the past year.

Consumer food prices were up 3.2 percent in February from a year earlier, below the overall inflation rate. For all of 1991, food prices are expected to rise 2-5 percent.

Fed Has Loosened Monetary Policy

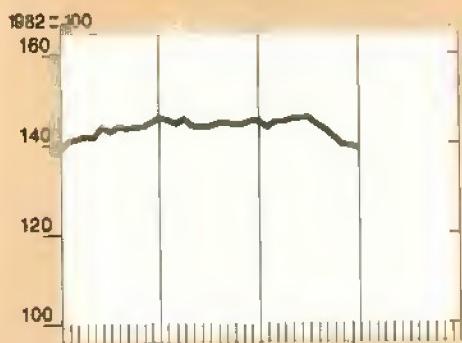
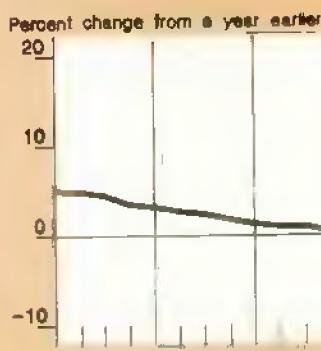
Still, with an outlook for a continued weak economy in the first half of 1991, the Federal Reserve likely will allow short-term interest rates to remain at current levels or even permit further declines. The drop in interest rates that has already occurred stands to promote a rebound in interest- and credit-sensitive spending—including new cars, new homes, and new factories—later this year.

The Fed is concerned about the weaknesses and restrictions in financial markets. Stringent credit requirements imposed by banks on borrowers eased little over the last 6 months. In recent testimony before Congress, Fed Chairman Greenspan noted that money supply growth in the fourth quarter was below the target rate.

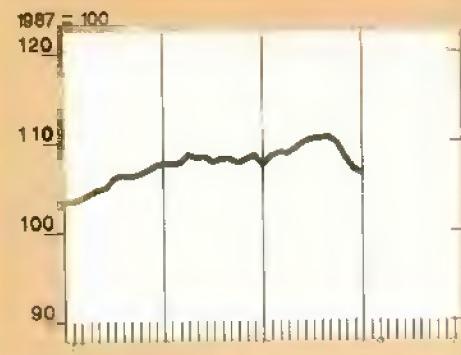
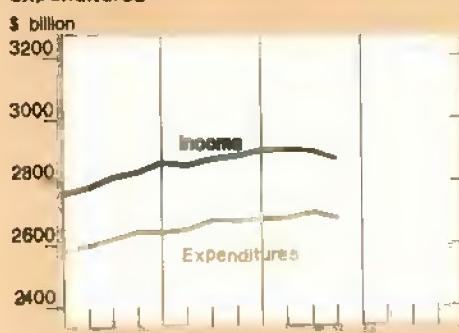
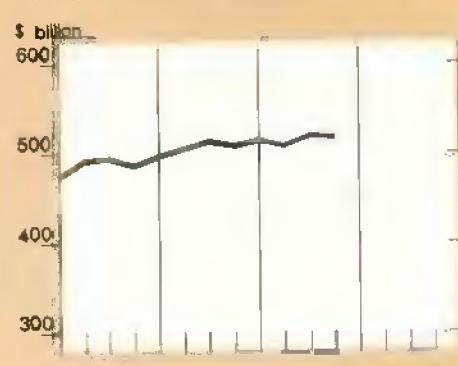
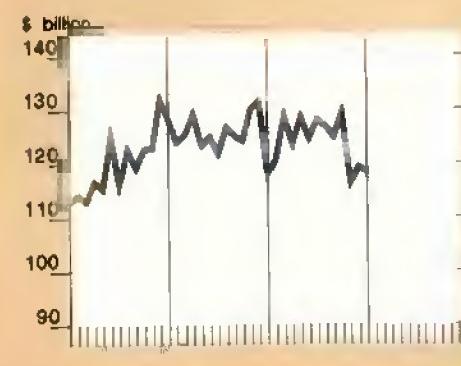
General Economic Indicators

General Economy

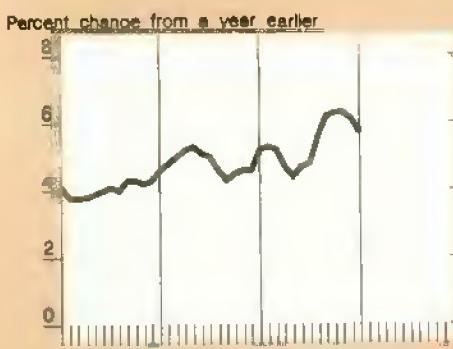
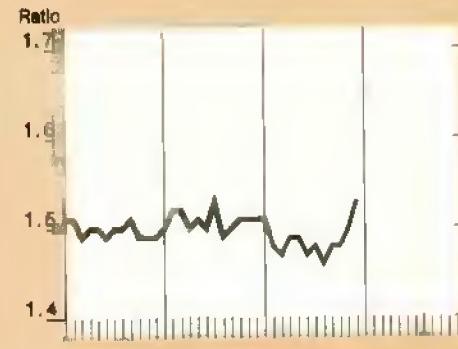
Composite leading economic indicators

Gross national product¹

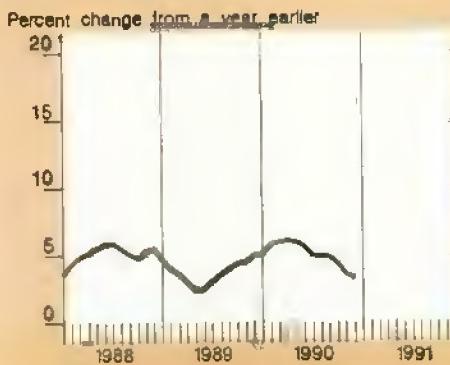
Industrial production

Disposable income and consumption expenditures²Nonresidential fixed investment²Manufacturers' durable goods orders³

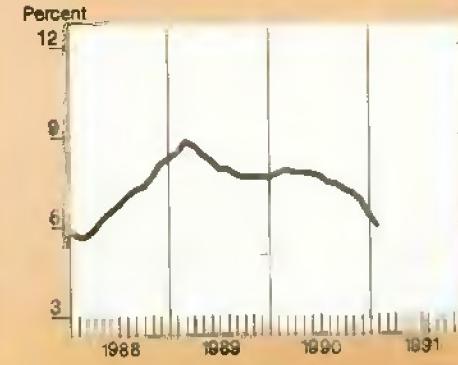
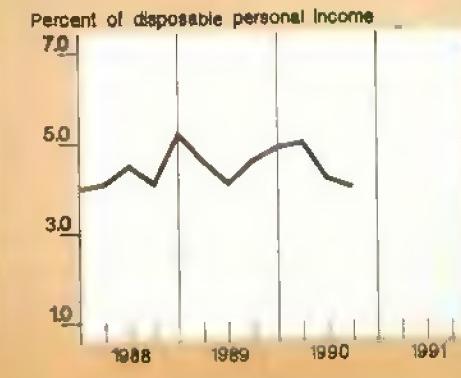
Consumer price index

Inventory/sales⁴Unemployment rate⁵

Money supply (M2)



3-month Treasury bill rate

Savings rate⁶¹Percent change from a year earlier in 1982 dollars. Seasonally adjusted annual rates. ²Billions of 1982 dollars seasonally adjusted at annual rates.³Nominal dollars. ⁴Manufacturing and trade, seasonally adjusted, based on 1982 dollars. ⁵Seasonally adjusted.⁶Calculated from disposition of Personal Income in 1982 dollars, seasonally adjusted at annual rates.

Sources: U.S. Dept. of Commerce, U.S. Dept. of Labor, and the Board of Governors of the Federal Reserve System.

General Economy

Money growth lagged despite Fed actions to boost it. The Fed eliminated the reserve requirement for nontransaction bank funds, cut the discount rate, and allowed the federal funds rate to fall from 8.2 percent in September to 6.25 in February. More recently, the Fed and other bank regulators agreed to loosen several accounting rules in an effort to encourage banks to make more loans.

For 1991, money growth targets were set slightly below the 1990 ranges, partly because of the current weak growth, but also because of the Fed's long-term goal of reducing inflationary pressures. But Greenspan indicated that interest rates could fall further if the economy continued on a downward path. [John Kitchen and Elizabeth Mack (202) 219-0782] AO

Rural Development



offer substantial rural job growth. These industries—poultry dressing plants, meat packing plants, cheese processing, and frozen fruit and vegetable processing—also happen to be the largest food processing employers in rural counties.

Job prospects in these industries, however, are only concentrated in those areas that can provide the raw inputs needed for manufacturing (see maps). Specifically, the meat packing industry is expected to continue to expand in selected rural counties of the Plains and the Corn Belt. The poultry dressing industry probably will go on expanding in rural areas of the Delmarva peninsula (of Delaware, Maryland, and Virginia), parts of Georgia, Alabama, and North Carolina, as well as in Arkansas and Texas.

The cheese processing industry is expected to continue growing in the rural counties of Wisconsin. And frozen fruit and vegetable processing should continue to grow in several rural Minnesota and Wisconsin counties. Employment in the other food processing industries, however, probably will continue to shrink.

"Rural" and "nonmetro" are used interchangeably here and mean counties outside metropolitan statistical areas.

Processing Sector Is Small & Concentrated

The food and beverage processing sector includes 47 manufacturing industries. Some 20,000 food processing establishments provided jobs to 1.4 million workers nationally in 1987—the year with the most recent data at the county level. The types of firms range from fruit canneries to grain mills and slaughter houses. There has been no evidence since then, anecdotal or otherwise, to suggest that the trends described here have shifted dramatically since 1987.

In the 1980's, more than half of all jobs in food and beverage processing were in just 7 of the 47 industries: bread and related products; meat packing; poultry dressing; bottled and canned soft drink processing; fluid milk production; sausage and other prepared meat production;

Outlook Dim For Food- Related Job Growth

Traditional U.S. food and beverage processors offer limited potential for employment growth in the 1990's. This is partly because demand for food and related products is expected to rise at about the same rate as the population, around 1 percent annually over the decade.

While past increases in the demand for convenience foods have led to some new jobs, the gains have not been widespread, either by industry or region. Indeed, employment in the U.S. food processing industry as a whole fell by more than 60,000 during the 1980's.

Employment growth probably will be confined to a relatively limited number of large firms, many having substantial market shares, in a small number of industries. The growth is expected to occur in several clusters of rural counties across the country.

Employment trends of the 1980's suggest that just four industries in the food processing sector can be expected to

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Rural Development

Employment Growth In Food Processing Is Scattered In Rural Clusters Across the Country

Meat packing



Poultry dressing



Cheese processing



Frozen fruit and vegetable processing



Includes metropolitan and nonmetropolitan counties. Counties shown gained at least 100 jobs in the given sector during 1981-87.

and miscellaneous food preparations. The seven also accounted for just under half of the number of establishments.

Food processing industries only accounted for 1.3 percent of all U.S. jobs in 1987. Moreover, the sector's 1.4 million jobs were less than half the number in U.S. farm production. The sector was highly concentrated in metropolitan counties; only 30 percent of the jobs were in rural areas.

Even in the top 10 farm-dependent states, food processing employment represented just 2.5 percent of total employment. The top 10 farm states—where farm output as a share of gross state output is more than twice the national aver-

age—were Arkansas, Idaho, Iowa, Kansas, Minnesota, Montana, Nebraska, North Dakota, South Dakota, and Wisconsin.

Farm production jobs in the 10 states outnumbered employment in food processing by more than three to one. Although the sector was not as concentrated in the metropolitan counties of these states as in the nation, rural portions of these states still claimed only 60 percent of the food processing jobs.

The Industry Has Restructured

Food processing industries lost some 59,000 jobs during 1981-87, as a wave of mergers and acquisitions swept the industry. Labor-intensive plants were either scrapped and replaced or rebuilt to rely more on machinery.

The employment change was not evenly distributed. Nationwide, metropolitan urban counties lost 84,000 jobs while rural counties gained 25,000 jobs. And the relative gain in rural counties was even more pronounced in the 10 farm states—rural counties gained some

Rural Development

14,000 jobs while urban counties lost 15,000.

Although there is some potential for employment growth in the rural food processing sector, jobs have increased in only a few major industries since 1975. During 1975-87 nonmetro employment grew in meat packing (by 7,900 jobs or 15 percent), poultry dressing (by 36,800 jobs or 80 percent), cheese processing (by 3,300 jobs or 23 percent), and frozen fruit and vegetable processing (by 6,300 jobs or 38 percent).

Trends in the 10 farm states generally mirror the national pattern, with rural counties gaining jobs only in the same four processing industries.

Employment To Grow In Few Counties

Nationally, fewer than 7 percent (192) of all counties gained at least 100 employees in the four major food processing industries during 1981-87. However, nearly two-thirds of these counties were in rural areas. And some of these rural counties gained food processing jobs at the expense of urban areas.

In the meat packing industry, for example, employment during the 1980's shifted away from older, unionized plants in the cities of the western Corn Belt (Iowa, western Illinois, southern Minnesota, and Wisconsin) to larger, nonunionized, more machine-intensive plants in the rural areas of Nebraska, Kansas, and the panhandle area of Texas and other parts of Iowa, northern Illinois, and Minnesota.

The presence of competitively priced raw inputs is an essential ingredient for growth. Employment growth in the meat packing industry, for example, was partly caused by the large expansion in the fed cattle industry in parts of the Central and Southern Plains.

The large-scale growth in jobs in the poultry dressing industry can be traced to cheap labor and a favorable climate that keeps energy costs down in the "broiler belt."

Growth in the cheese processing industry in Wisconsin draws on the local dairy herds. And the growth in the frozen fruit and vegetable processing industry in Minnesota and Wisconsin is linked to the crops farmers grow there—such as cherries, apples, sweet corn, beans, and peas. (*Dennis Brown and Mindy Petrulis (202) 219-0525, and Alex Majchrowicz (202) 219-0547*) AO





Sugar: Developed Nations Shift From Buyers to Sellers

During the last 30 years, the industrial market economies have become significantly more important producers and exporters of sugar relative to the less developed countries and what have been called the centrally planned economies. If current trends continue, government support of sugar producers in the market economies may decline. New technologies and investment are pushing down production costs in the industrial market economies.

The relative market shares of the industrial market economies increased significantly from the early 1960's to the late 1980's. Over the same period, the relative shares of the centrally planned economies dropped sharply, and the shares of less developed countries remained about the same.

The gains in market share by the industrial market economies have depended in part on government support, but government support for producers has been high in almost all countries. Gains were more likely due to the overall efficiencies possible in market economies, and to higher private sector expenditure on research and development in the wealthier economies.

Given current policies, it is probable that these trends will continue because the gap will remain between rich and poor countries' capacities to fund research and development in sugar production. However, if the GATT talks lower trade-distorting government support worldwide, many less developed countries

would export more sugar while the industrial market economies would export less.

Uncertainty about the future economic and political directions of the former centrally planned economies makes forecasting for this group almost impossible. However, if market-based policies are implemented in these countries, sugar production probably would share in the overall efficiency gains.

Governments Have Shaped Sugar Markets

Government intervention in sugar production has been pervasive around the world for hundreds of years. Most governments protect their sugar industries from market forces, and the location and volume of production is perhaps as much the result of government decisions as of market signals.

For example, government policies are estimated to have been responsible for over 30 percent of sugar producer revenues in the U.S., the EC, the USSR, Poland, Egypt, and Thailand during 1982-87 (see table). Sugar producers are generally subsidized in all types of economies—the centrally planned, the developing, and the developed. And sugar producers get more support, measured as a percentage of total revenues, than producers of most other commodities. However, producers in the industrial market economies get more support, both in absolute and percentage terms, than producers elsewhere.

In this article, competitiveness is used as a business term referring to the ability to obtain market share, not as an economic concept. So market share is taken as a measure of competitiveness regardless of the degree of government support.

Sugar Producers in Most Countries Studied Received Over 30 Percent of Their Revenue From Government Support

Producer subsidy equivalents, 1982-87 average	Centrally planned economies	Industrial market economies	Less developed countries
Above 30 percent	Poland USSR Yugoslavia	Canada EC Japan U.S.	Colombia Egypt India Indonesia Kenya Taiwan Thailand
Between zero and 30 percent		Australia	
Below zero	China	South Africa	Nigeria Pakistan

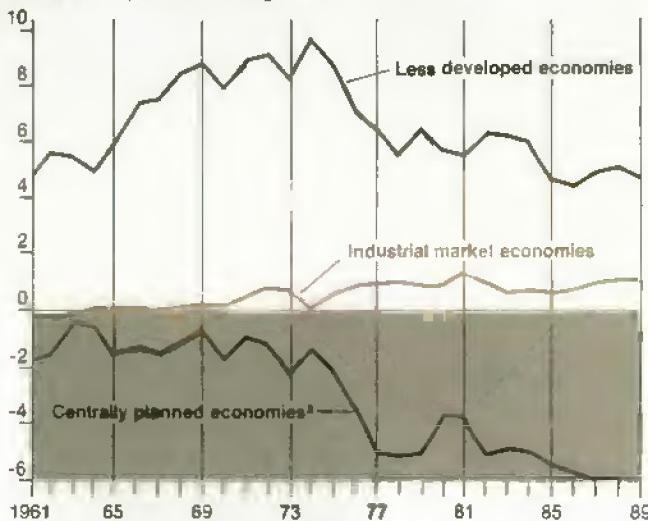
Source: ERS, USDA

*PSE's are total government transfers as a percentage of total farm revenue (including direct payments). Negative PSE's mean the net effect of government policies was to tax producers. Countries here are not representative of the world's sugar producers, but happen to be the only ones with enough data to estimate PSE's. Some PSE's are only for selected years.

Special Article

Industrial Market Economies Move Into Sugar Export Business

Revealed competitive advantage index¹



¹Measures the share of a commodity in a country's total merchandise exports, compared to world trade of the commodity as a share of total merchandise trade, minus the same ratio for imports. ²Excludes Cuba.

Because a small country may have a small market share, but still be very competitive, a measure of competitiveness should avoid the effect of country size. The revealed competitive advantage index is such a measure. The index measures the share of a commodity in a country's total merchandise exports, compared with world trade of the commodity as a share of total world merchandise trade. The same ratio for imports is then subtracted from the export ratio.

If a country does not import, only exports will be counted and the revealed competitive advantage index is positive. Likewise, if an importing country has no exports, the index will be negative. In general, a positive index means that a country is a net exporter, and a negative number means the country is a net importer.

Sugar Trade Shows Large Shifts

The share of world sugar output that is traded has declined. During 1965-67, world sugar exports averaged 19 million metric tons annually, or about 30 percent of average annual production of 64 million metric tons. During 1986-88, world trade averaged about 27.5 million metric tons a year, less than 27 percent of average world output of 103 million metric tons.

But the share of world sugar exports accounted for by the industrial market economies has doubled in the last two decades, from 17 percent in 1965-67 to 34 percent in 1986-88. By contrast, the share of exports from less developed countries has fallen from 42 to 37 percent, and the centrally planned economies' share has fallen from 41 to 29 percent.

The most dramatic change on the export scene, however, has been the EC's shift from net importer to net exporter over the last two decades. Since the bulk of EC sugar production is insulated from changes in world prices, subsidized EC exports enter the global market almost independently of the world price.

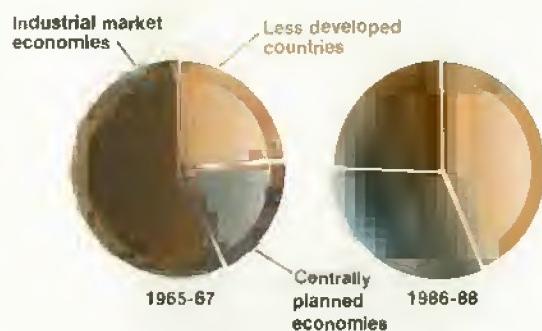
Changes in import shares have been equally dramatic. Imports by the industrial market economies comprised 57 percent of average annual world imports during 1965-67 but only 25 percent in 1986-88. Between the two periods, the import share of less developed nations rose from 23 to 44 percent, and the centrally planned economies' share climbed from 19 to 31 percent.

The most significant factor on the import side was the fall in U.S. purchases, which slipped from an average annual 4.03 million metric tons (23 percent of the world total) in 1965-67 to 1.44 million tons (5 percent) in 1986-88. Most of the decline was due to the substitution of high-fructose corn syrup (HFCS) for sugar in most soft drinks.

The only other country to substitute HFCS on a significant scale was Japan. But Japan's sugar imports rose from 1.6 to 1.8 million metric tons between 1965-67 and 1986-88. The EC's imports fell, slipping from 2.8 to 1.7 million metric tons. However, the drop primarily reflected higher supports to local producers—the Community has production quotas on HFCS that limit substitution.

In the USSR and China, output could not keep pace with increasing consumption. Between 1965-67 and 1986-88,

Industrialized Economies Cut Sugar Imports . . .



. . . And Double Their Export Share



Share of world sugar imports and exports.

Sugar Producers Get More Support*

Year	Industrial market economies			Centrally planned economies			Less developed countries		
	Sugar	All agricultural commodities	Difference	Sugar	All agricultural commodities	Difference	Sugar	All agricultural commodities	Difference
<i>Percent</i>									
1982	33	26	7	-33	.25	-8	-12	-22	10
1983	39	31	8	9	-13	22	3	-20	23
1984	52	30	22	15	-20	35	28	-24	52
1985	49	35	14	23	-22	45	28	-6	34
1986	55	47	8	39	-3	42	23	-12	35
1987	48	47	1	-18	-38	20	23	-7	30

Source: ERS-USDA

*Producer subsidy equivalents for sugar compared with PSE's for all agricultural commodities. Including sugar, 1982-87.

imports by the USSR rose from 2.2 to 4.4 million metric tons, and by China from 0.5 to 2.4 million metric tons.

Policies, Tastes, & Specialization Are Key Factors

Data were collected for 115 countries that accounted for virtually all world sugar production and consumption. Categorization of centrally planned economies was made on the basis of pre-1989 political and economic orientations.

Before 1975, the revealed competitive advantage index for the EC was generally negative, indicating the Community was a net importer. By 1989, the EC's revealed competitive advantage stood at a positive 0.6. This low value for one of the world's leading exporters partly reflects the large volume of sugar that the EC imports each year on a concessional basis from its former colonies, and partly reflects that while the EC's sugar exports are large in an absolute sense, they are small relative to the Community's total merchandise exports.

The U.S. continues to be a net importer, but has had a rising revealed competitive advantage over the last three decades. During the last decade, this was due more to events on the demand side than on the supply side, as the U.S. has diverted millions of tons of liquid sweetener demand from sugar to HFCS. However, U.S. policies also have limited imports and kept domestic prices above international prices.

Sugar cost-of-production data would not capture the demand effect. For example, people want foods with the characteristics of sweetness and calories. Competitiveness in sweeteners is the ability to provide products with those characteristics. This is one reason why policies that restrict substitution, such as the EC's virtual ban on HFCS (isoglucose in EC terminology), are harmful to competitiveness in the broader sense.

The revealed competitive advantage index for the industrial market economies as a group has risen from a negative value in the early 1960's to a consistently positive number in the 1980's. The index value for the centrally planned economies group

(excluding Cuba) shows a distinct downward trend and has always been negative. The less developed economies began the period with a strongly positive revealed competitive advantage, which then rose in the mid-1970's, but fell in the 1980's.

Cuba Has the Highest Revealed Competitive Advantage

Cuba's dependence on sugar exports is unusually heavy. Cuba's revealed competitive advantage rose from about 60 in the early 1960's to close to 200 by the late 1980's. In 1988, Cuba's total exports were \$6.5 billion, with sugar making up 63 percent. Cuba's high index value shows that the nation exports huge volumes of sugar and not much else. In comparison, for the other 114 countries studied, 1988's total merchandise exports were valued at \$2.8 trillion, and sugar trade at \$6 billion, or about two-tenths of a percent of the total.

However, over half of Cuba's sugar exports have historically gone to the Soviet Union, and most of the rest to China and other COMECON nations. These buyers have paid above-market prices, but in unconvertible currencies.

Ranked by their average revealed competitive advantages for 1985-89, the next-highest countries, after Cuba, are Mauritius,

Cuba's Dependence on Sugar Exports Surged While the U.S. Cut Imports

Country	Average revealed competitive advantage	
	1961-65	1985-89
USSR	-2.0	-10.8
New Zealand	-1.1	-1.1
United States	-2.1	-0.3
EC	-0.12	0.4
Cuba	66.6	180.0
Brazil	3.0	3.1
Zimbabwe	1.9	8.7
Australia	3.3	4.7

Special Article

How to Calculate an RCA Index

Computing the revealed competitive advantage index for U.S. sugar in 1989 (million \$US):

$$\begin{aligned}
 \text{RCA} &= \frac{\text{U.S. sugar exports / U.S. total exports}}{\text{World sugar exports / World total exports}} - \frac{\text{U.S. sugar imports / U.S. total imports}}{\text{World sugar imports / World total exports}} \\
 &= \frac{157}{11,141} \frac{363,985}{3,044,264} - \frac{688}{11,122} \frac{492,922}{3,146,505} \\
 &= \frac{.0004}{.0037} - \frac{.014}{.0035} \\
 &= .118 - .395 \\
 &= -.277
 \end{aligned}$$

Guyana, and the Dominican Republic. But although all are significant sugar exporters, none has been among the top five in recent years.

Ranked by volume, the largest exporters after Cuba and the EC are Thailand, Australia, and Brazil. Thailand increased its sugar exports dramatically—its revealed competitive advantage rose from about zero in the early 1960's to about 10 in the late 1980's. In recent years Thailand has exported around 3 million metric tons a year, behind only Cuba and the EC.

The Thai domestic consumer price of sugar is much above world prices, although returns from sugar exports do fluctuate with world prices. The net effects of Thai sugar policy are to reduce domestic consumption, increase output, and boost exports.

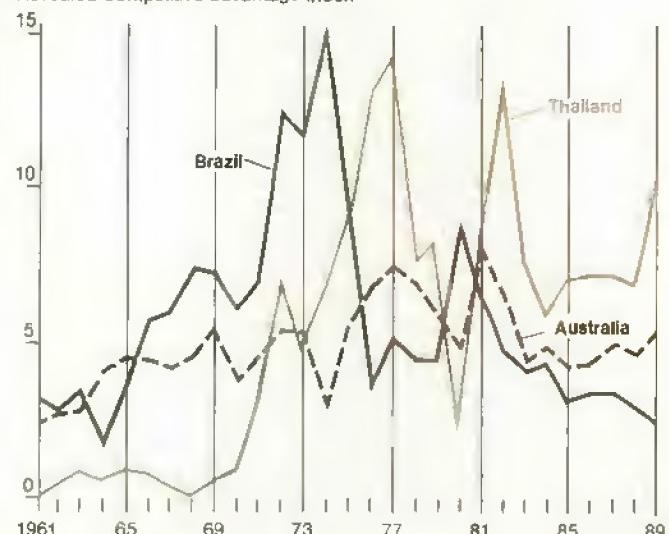
Australia has exported just slightly less than Thailand in recent years, and shows a slow rising trend in its revealed competitive advantage. Brazil, at one time the world's second-largest exporter, has been exporting less in recent years and shows a generally declining though positive revealed competitive advantage.

Like importers of most commodities, sugar importers do not specialize as much as exporters, and so the absolute values of their revealed competitive advantages are generally lower. For example, in recent years the countries with the lowest revealed

competitive advantages were the Yemen Arab Republic, Sri Lanka, Syria, and the USSR, none of which had a revealed competitive advantage below -11, whereas four exporters had revealed competitive advantages topping 40. The USSR stands out as the world's largest importer and had the lowest (-10.8) average revealed competitive advantage during 1985-89.

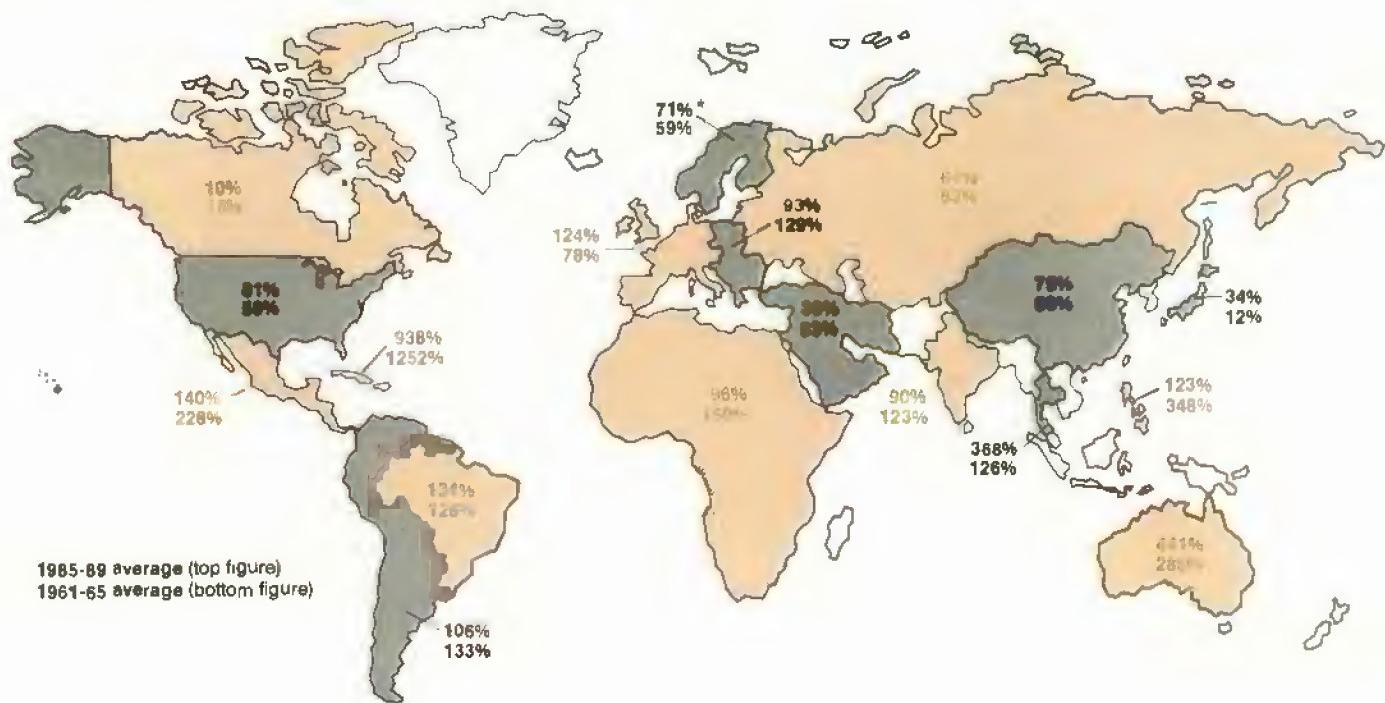
Thailand Emerges as Major Sugar Exporter

Revealed competitive advantage index*



*Measures the share of a commodity in a country's total merchandise exports, compared to world trade of the commodity as a share of total merchandise trade, minus the same ratio for imports.

Developing Countries' Sugar Exports Have Declined Since the 1960's



Each average is a ratio of 5-year average sugar production to sugar consumption expressed as a percentage.

*Western Europe excluding the EC

More Countries Have Become Sugar Exporters

	Centrally planned economies	Industrial market economies	Less developed countries	All countries in sample
<i>Percent</i>				
Share of world production (1974-89 average)	27	29	44	100
<i>Number of countries</i>				
Total number in group	12	24	79	115
Number of net importers: 1961-65 average	6	19	49	74
1985-89 average	8	13	48	69
Number of net exporters: 1961-65 average	6	5	30	41
1985-89 average	4	11	31	46
RCA fell between 1961-65 and 1985-89	9	2	35	46
RCA rose between 1961-65 and 1985-89	3	22	44	69
RCA changed sign to negative (became net importer)	3	0	7	10
RCA changed sign to positive (became net exporter)	1	6	8	15

Special Article

Specialization Has Slowed

The less developed economies accounted for about 44 percent of world sugar production during 1974-89, the industrial market economies about 29 percent, and the centrally planned economies (including Cuba) about 27 percent. Of the 115 countries, 74 were net importers during 1961-65, but only 68 during 1985-89. Specialization in sugar production has decreased because the number of net importers has dropped.

Shifts in competitiveness between the early 1960's and the late 1980's show that among the 12 centrally planned economies, 9 experienced a decline in revealed competitive advantage, and only 3 showed an increase. Three centrally planned economies went from being net exporters to being net importers, while only one made the opposite move.

The changes in competitiveness among the industrial market economies over the period are more striking. Of 24 countries, 22 showed increases in their revealed competitive advantages, and only 2 posted declines. They were Greece and Israel. Since Israel produces no sugar, this change reflects only consumption and import patterns.

Not a single industrial market economy switched from net exporter to net importer, while six went the other way. All six (Sweden, Austria, West Germany, Netherlands, Spain, and Ireland) are West European countries, and four are members of the EC.

Changes among less developed economies were not so dramatic or consistent. Of the 79 less developed economies, revealed competitive advantages rose for 44 and fell for 35. Seven less developed economies became net importers, while eight became net exporters. [Ron Lord (202) 219-0888] AG



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Statistical Indicators

Summary Data

Table 1.—Key Statistical Indicators of the Food & Fiber Sector

	1989		1990		1991				
	IV	Annual	IV	Annual	IF	II F	III F	IV F	Annual F
Prices received by farmers (1977=100)	146	147	145	150	145	143	144	141	—
Livestock & products	185	180	187	171	164	164	165	163	—
Crops	126	134	122	128	125	121	121	119	—
Prices paid by farmers, (1977=100)	185	186	174	171	173	—	—	—	—
Production items	178	178	187	184	187	—	—	—	—
Commodities & services, interest, taxes, & wages	—	—	—	—	—	—	—	—	—
Cash receipts (\$ bil.) 1/	162	169	164	167	160	160	174	163	165-170
Livestock (\$ bil.)	89	84	89	89	85	85	89	80	85-89
Crops (\$ bil.)	73	75	74	78	74	84	85	74	77-81
Market basket (1982-84=100)	—	—	—	—	—	—	—	—	—
Retail cost	127	125	135	134	—	—	—	—	—
Farm value	108	107	110	114	—	—	—	—	—
Spread	137	134	149	144	—	—	—	—	—
Farm value/retail cost (%)	30	30	28	30	—	—	—	—	—
Retail prices (1982-84=100)	—	—	—	—	—	—	—	—	—
Food	127	125	134	132	136	—	—	—	135-139
At home	128	124	134	132	136	—	—	—	135-137
Away from home	130	127	136	133	137	—	—	—	138-141
Agricultural exports (\$ bil.) 2/	10.8	39.7	9.9	40.1	11.3	8.8	8.4	—	37.0
Agricultural imports (\$ bil.) 2/	5.4	21.5	5.4	22.5	5.8	5.5	5.3	—	22.5
Commercial production	—	—	—	—	—	—	—	—	—
Red meat (mil. lb.)	10,105	39,418	9,852	38,503	9,585	9,672	9,947	10,106	30,310
Poultry (mil. lb.)	5,727	22,039	6,140	23,638	5,960	6,230	6,315	6,420	24,925
Eggs (mil. doz.)	1,415	5,598	1,444	5,659	1,415	1,430	1,425	1,445	6,710
Milk (bil. lb.)	34.9	144.3	36.3	148.6	37.6	39.2	36.9	36.5	150.2
Consumption, per capita *	—	—	—	—	—	—	—	—	—
Red meat and poultry (lb.)	64.6	209.2	64.8	209.6	51.9	53.2	54.4	56.5	218.0
Corn beginning stocks (mil. bu.) 3/	3,419.3	4,259.1	1,344.5	7,082.1	8,940	—	—	—	8,940.0
Corn use (mil. bu.) 3/	1,489.2	7,260.2	—	8,115.0	2,190	—	—	—	8,045
Prices 4/	—	—	—	—	—	—	—	—	—
Choice steer—Neb. Direct **	74.13	73.88	80.80	78.56	78-80	77-83	75-81	77-83	76-82
Barrows & gilts—7 mkt. (\$/cwt.)	47.42	44.03	51.87	54.45	50-52	51-57	53-59	48-54	50-56
Broilers—12-city (cts./lb.)	49.8	59.0	49.8	54.8	51-53	52-58	53-59	50-56	51-57
Eggs—NY gr. A large (cts./doz.)	92.6	81.9	88.5	82.2	85-87	89-75	71-77	73-79	74-80
Milk—all at plant (\$/cwt.)	15.47	13.57	12.63	13.77	11.50-	10.50-	10.85-	11.50-	11.10-
Wheat—KC HRW ordinary (\$/bu.)	4.34	4.38	2.70	—	11.80	11.10	11.45	12.50	11.70
Corn—Chicago (\$/bu.)	2.36	2.55	2.30	—	—	—	—	—	—
Soybeans—Chicago (\$/bu.)	5.70	6.70	5.80	—	—	—	—	—	—
Cotton—Avg. spot mkt. (cts./lb.)	67.1	63.7	69.9	—	—	—	—	—	—
	1983	1984	1985	1986	1987	1988	1989	1990	1991 F
Gross cash income (\$ bil.)	150.6	155.5	157.2	152.0	164.3	170.4	177.5	183	180-185
Gross cash expenses (\$ bil.)	111.0	119.0	109.3	105.2	108.2	112.3	122.8	125	124-130
Net cash income (\$ bil.)	39.5	36.6	47.9	46.7	56.1	58.1	54.6	58	53-58
Net farm income (\$ bil.)	15.3	26.3	31.0	31.0	41.3	41.8	46.7	49	42-47
Farm real estate values 5/	—	—	—	—	—	—	—	—	—
Nominal (\$ per acre)	788	801	713	640	500	632	667	693	714-728
Real (1977 \$)	472	459	395	346	317	322	325	322	315-321

1/ Quarterly data seasonally adjusted at annual rates. 2/ Annual data based on Oct.-Sept. fiscal years ending with year indicated. 3/ Dec-Feb. first quarter; Mar.-May second quarter; June-Aug. third quarter; Sept.-Nov. fourth quarter; Sept.-Aug. annual. Use includes exports & domestic disappearance. 4/ Simple averages. 5/ 1990-91 values as of January 1. 1988-89 values as of February 1. 1982-85 values as of April 1. F = forecast. — = not available.

* The pork carcass to retail conversion factor has been revised. ** Omaha Choice steer price has been replaced by the Nebraska Direct, 1,100-1,300 lb. Choice steer Price.

U.S. and Foreign Economic Data

Table 2.—U.S. Gross National Product & Related Data

	Annual			1989		1990			
	1988	1989	1990 R	IV	I	II	III	IV R	
\$ billion (quarterly data seasonally adjusted at annual rates)									
Gross national product	4,873.7	5,200.6	5,463.6	5,289.3	5,375.4	5,443.3	5,514.6	5,521.3	
Personal consumption expenditures	3,238.2	3,450.1	3,658.6	3,518.5	3,588.1	3,622.7	3,693.4	3,730.3	
Durable goods	457.5	474.6	480.6	471.2	492.1	478.4	482.3	470.8	
Nondurable goods	1,060.0	1,130.0	1,194.1	1,148.8	1,174.7	1,179.0	1,205.0	1,217.9	
Clothing & shoes	191.1	204.6	213.3	208.7	212.9	212.6	215.8	211.9	
Food & beverages	562.6	595.3	625.1	602.2	616.4	623.3	629.8	630.9	
Services	1,720.7	1,845.5	1,983.5	1,898.5	1,921.3	1,965.3	2,006.2	2,041.3	
Gross private domestic investment	747.1	771.2	741.9	782.7	747.2	750.0	759.7	701.8	
Fixed Investment	720.8	742.9	746.1	737.7	758.9	745.6	750.7	729.3	
Change in business inventories	26.2	28.3	-4.2	25.0	-11.8	13.4	9.0	-27.6	
Net exports of goods & services	-74.1	-46.1	-35.3	-36.3	-30.0	-24.9	-41.3	-42.3	
Government purchases of goods & services	962.5	1,025.6	1,097.8	1,043.3	1,070.1	1,086.4	1,102.8	1,131.8	
1982 \$ billion (quarterly data seasonally adjusted at annual rates)									
Gross national product	4,016.9	4,117.7	4,156.3	4,133.2	4,150.6	4,155.1	4,170.0	4,149.5	
Personal consumption expenditures	2,006.5	2,056.8	2,082.4	2,009.9	2,077.3	2,078.6	2,096.8	2,076.9	
Durable goods	418.2	428.0	427.9	423.1	437.6	426.6	429.5	417.5	
Nondurable goods	909.4	919.9	911.4	923.0	915.6	911.2	916.4	902.6	
Clothing & shoes	185.0	172.7	172.7	175.1	174.2	171.3	174.4	170.9	
Food & beverages	482.2	462.9	457.7	460.3	457.4	459.3	459.4	454.7	
Services	1,278.9	1,309.0	1,343.2	1,323.6	1,324.2	1,340.6	1,350.8	1,356.6	
Gross private domestic investment	705.7	716.9	689.6	709.1	700.7	700.7	897.0	659.8	
Fixed Investment	682.1	693.1	692.1	690.2	702.9	691.2	692.3	682.0	
Change in business inventories	23.6	23.8	-2.5	18.9	-2.2	9.5	4.7	-22.2	
Net exports of goods & services	-75.9	-54.1	-38.2	-47.9	-35.4	-44.6	-46.5	-18.5	
Government purchases of goods & services	780.5	798.1	820.6	802.2	807.9	820.2	822.7	831.3	
GNP Implicit price deflator (% change)	3.3	4.1	4.1	3.8	4.8	4.7	3.7	2.8	
Disposable personal income (\$ bil.)	3,479.2	3,725.5	3,945.6	3,799.6	3,887.7	3,925.7	3,989.1	4,000.1	
Disposable per. income (1982 \$ bil.)	2,800.5	2,869.0	2,893.1	2,883.2	2,900.9	2,902.6	2,898.0	2,870.7	
Per capita disposable per. income (\$)	14,123	14,973	15,693	15,210	15,527	15,639	15,765	15,842	
Per capita dis. per. Income (1982 \$)	11,368	11,531	11,507	11,541	11,586	11,584	11,511	11,370	
U.S. population, total, incl. military abroad (mil.)	248.4	248.6	251.4	249.8	250.4	251.0	251.8	252.5	
Civilian population (mil.)	244.1	246.6	249.2	247.6	248.2	248.8	249.6	250.0	
	Annual			1990				1991	
	1988	1989	1990 P	Jan	Oct	Nov	Dec	Jan	
Monthly data seasonally adjusted									
Industrial production (1987=100)	105.4	108.1	109.2	107.5	109.9	108.2	107.0	106.5	
Leading economic indicators (1982=100)	142.7	144.9	144.0	145.4	141.5	139.9	139.7	139.1	
Civilian employment (mil. persons)	115.0	117.3	117.9	117.9	117.7	117.4	117.6	116.9	
Civilian unemployment rate (%)	5.4	5.2	5.4	5.3	5.7	5.9	6.1	6.2	
Personal Income (\$ bil. annual rate)	4,070.8	4,384.3	4,645.1	4,532.2	4,695.1	4,714.1	4,740.9	4,719.1	
Money stock—M2 (daily avg.) (\$ bil.) 1/	3,072.4	3,223.1	3,330.5	3,233.6	3,325.2	3,325.6	3,330.5	3,332.6	
Three-month Treasury bill rate (%)	6.89	8.12	7.51	7.64	7.19	7.07	6.81	6.30	
AAA corporate bond yield (Moody's) (%)	9.71	9.26	9.32	8.99	9.53	9.30	9.05	9.04	
Housing starts (1,000) 2/	1,488	1,376	1,193	1,543	1,026	1,130	975	850	
Auto sales at retail, total (mil.)	10.6	9.9	9.5	10.2	9.3	8.8	8.9	7.6	
Business inventory/sales ratio	1.49	1.50	—	1.51	1.48	1.50	1.53	—	
Sales of all retail stores (\$ bil.)	137.5	144.5	150.0	150.3	151.8	151.7	149.5	148.2	
Nondurable goods stores (\$ bil.)	85.2	90.7	96.0	93.6	97.7	96.3	97.9 P	97.9	
Food stores (\$ bil.)	27.2	29.1	30.6	29.9	30.9	31.1	31.2 P	31.4	
Eating & drinking places (\$ bil.)	13.6	14.5	16.1	14.8	15.2	15.3	15.3 P	15.4	
Apparel & accessory stores (\$ bil.)	7.1	7.6	7.9	7.7	7.8	7.6	7.7 P	7.7	
	Annual			1990				1991	
	1988	1989	1990	Feb	Nov	Dec	Jan	Feb	
Foreign exchange value of the dollar									
Japanese yen per U.S. dollar	128.2	137.9	145.7	145.7	128.9	133.8	131.5	130.3	
German marks per U.S. dollar	1.757	1.874	1.672	1.677	1.480	1.500	1.487	1.480	

1/ Annual data as of December of the year listed. 2/ Private, including farm. R = revised. P = preliminary. — = not available.

Information contact: Ann Duncan (202) 219-0313.

Table 3.—Foreign Economic Growth, Inflation, & Export Earnings

	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991 F	1992 F	Average 1980-89
Annual percent change												
World, less U.S.												
Real GDP	1.1	2.0	4.3	3.8	2.7	3.8	4.3	3.4	2.1	1.5	3.3	3.0
Consumer prices	13.1	11.8	12.5	13.0	9.1	11.4	17.7	31.9	79.8	23.0	14.5	15.0
Merch. exports	-7.9	-1.6	5.4	1.8	10.8	18.9	12.7	7.4	11.7	8.7	8.4	8.6
Developed less U.S.												
Real GDP	1.0	2.2	3.9	3.5	2.7	3.5	4.4	4.0	3.9	2.5	3.3	2.9
Consumer prices	8.2	5.8	4.9	4.5	2.7	2.6	2.9	4.3	4.8	4.8	4.4	5.7
Merch. exports	-4.4	-0.5	9.3	4.6	19.5	17.7	12.3	6.0	14.3	11.1	8.0	7.5
Developing												
Real GNP	1.9	1.3	4.5	4.6	2.8	4.1	4.2	3.4	2.1	2.4	5.7	3.4
Consumer prices	25.3	32.7	38.2	39.8	27.0	35.5	57.0	78.0	278.6	48.2	34.8	39.0
Merch. exports	-13.3	-3.3	3.8	-3.2	-6.1	22.0	13.8	10.8	7.5	8.8	12.4	4.9
Asia, incl. China												
Real GDP	5.7	8.0	7.5	7.3	5.8	8.9	8.8	6.3	8.1	5.3	8.2	8.7
Consumer prices	8.4	8.8	8.1	8.0	5.8	7.4	11.8	10.1	8.2	9.4	8.3	8.2
Merch. exports	-0.5	4.8	14.0	-0.9	8.8	30.1	23.1	11.5	9.3	11.8	13.0	12.6
Latin America												
Real GDP	-1.5	-2.7	3.3	3.3	3.8	3.4	0.7	1.2	-1.2	1.4	3.5	1.7
Consumer prices	87.1	108.7	133.5	145.1	82.1	116.3	218.6	345.7	927.5	137.4	93.8	133.2
Merch. exports	-10.8	-0.2	0.3	-5.6	-17.0	13.7	13.9	12.4	6.6	4.6	5.3	4.8
Africa												
Real GDP	-1.7	-0.8	-0.8	3.4	-0.8	0.8	2.3	2.8	2.8	2.6	2.2	0.4
Consumer prices	13.1	18.0	20.8	13.2	12.5	13.1	19.2	22.6	18.0	18.2	14.7	17.0
Merch. exports	-27.9	15.2	-1.0	-2.5	-17.4	14.7	-4.7	16.2	21.0	3.0	5.6	1.2
Middle East												
Real GDP	2.9	-1.8	2.9	2.3	2.0	1.5	1.4	3.9	-2.8	-8.5	11.0	2.1
Consumer prices	12.0	11.0	14.3	17.1	14.9	19.2	19.4	14.5	18.7	19.1	15.5	15.8
Merch. exports	-21.1	-22.2	-10.5	-6.7	-19.6	24.2	1.6	24.1	22.3	-3.3	17.7	-1.2
Eastern Europe, incl. USSR												
Real GDP	2.0	3.0	1.8	1.8	3.0	1.4	4.2	1.0	-4.7	-4.5	-2.3	2.1
Consumer prices	12.8	6.4	4.2	8.0	7.4	8.9	15.6	67.3	77.6	50.6	24.4	14.8
Merch. exports	1.3	3.7	1.8	0.2	8.2	5.1	3.0	0.1	-4.3	4.6	3.6	4.8

F = forecast.

Information contact: Alberto Jérardo, (202) 219-0708.

Farm Prices

Table 4.—Indexes of Prices Received & Paid by Farmers, U.S. Average

	Annual			1990				1991			
	1988	1989	1990	Feb	Sept	Oct	Nov	Dec	Jan R	Feb P	
	1977=100										
Prices received											
All farm products	138	147	160	151	148	146	146	143	145	144	
All crops	126	134	128	133	123	120	124	121	123	122	
Food grains	138	158	123	146	103	101	100	100	102	102	
Feed grains & hay	120	128	123	120	120	114	113	115	117	117	
Feed grains	117	123	118	115	115	108	108	110	112	112	
Cotton	95	98	107	101	108	112	113	109	106	110	
Tobacco	132	145	148	148	152	151	152	152	154	154	
Oil-bearing crops	108	102	93	87	95	95	96	96	95	92	
Fruit, all	185	192	191	174	198	181	205	194	208	202	
Fresh market 1/	197	203	202	181	214	194	221	204	221	213	
Commercial vegetables	140	151	154	217	141	156	162	146	145	145	
Fresh market	135	144	144	208	138	150	161	135	138	135	
Potatoes & dry beans	124	186	191	198	131	118	132	136	137	135	
Livestock & products	150	160	171	169	173	171	166	164	168	166	
Meat animals	168	174	193	188	193	196	190	190	193	190	
Dairy products	128	140	142	148	146	138	132	123	121	119	
Poultry & eggs	118	137	131	131	136	129	127	129	134	122	
Prices paid											
Commodities & services											
Interest, taxes, & wage rates	170	178	184	—	—	187	—	—	187	—	
Production items	157	167	171	—	—	174	—	—	173	—	
Feed	128	135	126	—	—	124	—	—	123	—	
Feeder livestock	192	194	213	—	—	210	—	—	216	—	
Seed	150	165	165	—	—	163	—	—	163	—	
Fertilizer	130	137	130	—	—	132	—	—	132	—	
Agricultural chemicals	126	132	139	—	—	141	—	—	141	—	
Fuels & energy	166	181	204	—	—	239	—	—	219	—	
Farm & motor supplies	148	166	164	—	—	158	—	—	156	—	
Autos & trucks	218	223	231	—	—	233	—	—	233	—	
Tractors & self-propelled machinery	181	193	202	—	—	208	—	—	208	—	
Other machinery	197	208	218	—	—	220	—	—	220	—	
Building & fencing	138	141	144	—	—	144	—	—	144	—	
Farm services & cash rent	148	158	180	—	—	166	—	—	172	—	
Int. payable per acre on farm real estate debt	182	177	174	—	—	174	—	—	173	—	
Taxes payable per acre on farm real estate	147	152	157	—	—	157	—	—	162	—	
Wage rates (seasonally adjusted)	172	186	192	—	—	186	—	—	186	—	
Production items, interest, taxes, & wage rates	160	167	172	—	—	174	—	—	174	—	
Ratio, prices received to prices paid (%) 2/	82	83	82	83	80	78	78	78	78	77	
Prices received (1910-14=100)	632	673	664	691	678	667	664	654	663	660	
Prices paid, etc. (price index) (1910-14=100)	1,167	1,221	1,265	—	—	1,288	—	—	1,289	—	
Parity ratio (1910-14=100) (%) 2/	54	55	54	—	54	52	52	51	51	—	

1/ Fresh market for noncitrus; fresh market & processing for citrus. 2/ Ratio of index of prices received for all farm products to index of prices paid for commodities & services, interest, taxes, & wage rates. Ratio uses the most recent prices paid index. Prices paid data are quarterly & will be published in January, April, July, & October. R = revised. P = preliminary. — = not available.

Information contact: Ann Duncan (202) 219-0313.

Table 5.—Prices Received by Farmers, U.S. Average

	Annual 1/			1990					1991	
	1988	1989	1990 P	Feb	Sept	Oct	Nov	Dec	Jan R	Feb P
CROPS										
All wheat (\$/bu.)	3.72	3.72	2.65-2.85	3.68	2.48	2.42	2.39	2.40	2.42	2.43
Rice, rough (\$/cwt)	6.83	7.35	6.25-6.75	7.57	6.25	6.02	6.30	6.08	6.33	6.43
Corn (\$/bu.)	2.54	2.36	2.20-2.40	2.32	2.32	2.19	2.17	2.22	2.27	2.27
Sorghum (\$/cwt)	4.05	3.79	3.70-3.88	3.53	3.95	3.56	3.57	3.67	3.72	3.83
All hay, baled (\$/ton)	85.20	86.00	86.00	85.70	85.70	86.00	81.50	80.70	82.00	80.40
Soybeans (\$/bu.)	7.42	5.70	5.40-6.00	5.50	5.90	5.87	5.78	5.72	5.72	5.60
Cotton, upland (cts./lb.) 2/	55.8	63.2	68.10	61.0	65.1	67.5	68.2	65.9	64.2	66.8
Potatoes (\$/cwt)	6.02	7.36	6.15	7.70	6.47	4.89	5.28	5.54	5.88	5.49
Lettuce (\$/cwt) 3/	14.70	12.00	11.80	6.61	18.40	19.70	18.50	10.70	10.10	6.48
Tomatoes fresh (\$/cwt) 3/	26.90	32.90	26.40	97.60	24.00	31.30	30.40	29.80	23.10	30.00
Onions (\$/cwt)	9.75	11.60	10.30	15.80	8.78	10.50	10.70	14.40	16.60	10.10
Dry edible beans (\$/cwt)	29.90	28.50	18.80	32.20	18.30	17.80	19.10	18.80	17.30	18.20
Apples for fresh use (cts./lb.)	17.4	13.4	—	12.4	24.5	19.4	20.2	20.8	20.1	20.7
Pears for fresh use (\$/ton)	358.00	338.00	392.00	345.00	389.00	373.00	390.00	361.00	356.00	382.00
Oranges, all uses (\$/box) 4/	7.18	6.89	5.90	6.52	6.31	4.48	6.31	6.18	6.62	5.98
Grapefruit, all uses (\$/box) 4/	5.43	4.49	6.21	5.50	7.22	6.61	5.53	5.63	5.66	4.50
LIVESTOCK										
Beef cattle (\$/cwt)	66.80	69.70	74.80	74.60	75.00	75.50	76.30	76.10	76.60	77.30
Calves (\$/cwt)	89.90	91.80	96.70	95.80	95.50	92.80	93.90	96.80	98.00	102.00
Hogs (\$/cwt)	42.50	43.20	54.00	48.20	54.30	56.80	50.20	47.80	50.00	51.00
Lambs (\$/cwt)	69.50	67.30	58.00	59.80	52.80	52.00	50.10	48.00	48.00	48.30
All milk, sold to plants (\$/cwt)	12.26	13.56	13.75	14.40	14.20	13.20	12.80	11.90	11.70	11.60
Milk, manuf. grade (\$/cwt)	11.15	12.38	12.30	12.50	12.50	11.80	10.50	10.50	10.30	10.20
Broilers (cts./lb.)	34.0	36.0	32.9	33.5	35.2	29.0	28.2	28.8	30.9	29.9
Eggs (cts./doz.) 5/	53.3	70.0	70.0	70.4	68.5	73.5	72.9	78.5	79.1	67.7
Turkeys (cts./lb.)	37.0	40.0	38.3	33.7	40.6	42.2	43.0	35.6	33.9	34.4
Wool (cts./lb.) 6/	138.0	124.0	78.8	70.6	71.9	83.5	58.0	48.2	38.2	42.1

1/ Season average price by crop year for crops. Calendar year average of monthly prices for livestock. 2/ Weighted average of first 7 months of the season—not a projection for 1990/91. 3/ Excludes Hawaii. 4/ Equivalent on-tree returns. 5/ Average of all eggs sold by producers including hatching eggs & eggs sold at retail. 6/ Average local market price, excluding incentive payments. R = revised. P = preliminary. — not available.

Information contact: Ann Duncan (202) 219-0313.

Producer & Consumer Prices

Table 6.—Consumer Price Index for All Urban Consumers, U.S. Average (Not Seasonally Adjusted)

	Annual	1990									1991
		1990	Jan	June	July	Aug	Sept	Oct	Nov	Dec	
1982-84=100											
Consumer Price Index, all items	130.7	127.4	129.9	130.4	131.6	132.7	133.5	133.8	133.8	134.6	
Consumer Price Index, less food	130.3	128.7	129.4	130.0	131.3	132.6	133.5	133.7	133.7	134.3	
All food	132.4	130.4	132.0	132.7	132.9	133.2	133.6	134.0	134.2	135.8	
Food away from home	133.4	130.3	133.4	133.9	134.3	134.6	135.0	135.4	135.7	135.8	
Food at home	132.3	131.0	131.7	132.5	132.7	132.9	133.4	133.8	133.8	136.4	
Meats 1/	129.5	122.3	129.6	130.3	130.5	131.0	131.7	133.1	133.6	133.5	
Beef & veal	128.8	124.5	129.0	129.2	128.5	129.5	130.1	131.0	133.0	132.9	
Pork	129.8	104.6	132.9	134.8	136.5	135.4	136.4	137.1	136.8	136.5	
Poultry	132.5	128.6	134.0	135.3	133.6	134.6	133.7	130.5	129.7	131.3	
Fish	148.7	149.0	143.7	143.3	145.2	147.4	147.0	147.0	148.5	151.1	
Eggs	124.1	143.9	112.2	109.1	119.6	120.8	125.5	128.5	128.7	139.8	
Dairy Products 2/	126.5	125.8	124.9	125.7	127.3	127.8	128.6	128.1	128.7	125.2	
Fats & oils 3/	128.3	123.5	125.5	126.6	127.4	128.2	128.1	128.8	131.0	132.4	
Fresh fruit	170.9	171.4	173.2	176.6	180.6	188.7	183.2	184.8	171.2	190.2	
Processed fruit	136.9	125.1	140.1	140.1	140.0	139.9	139.5	137.0	134.6	134.7	
Fresh vegetables	151.1	178.9	140.0	143.8	139.8	137.3	142.2	149.5	144.0	159.9	
Potatoes	182.6	150.1	185.8	179.7	188.8	152.0	139.9	134.5	133.9	139.6	
Processed vegetables	127.5	125.4	127.8	128.2	128.8	128.8	127.9	127.5	128.1	127.7	
Cereals & bakery products	140.0	138.9	140.1	140.5	141.4	141.6	141.9	141.7	142.4	144.3	
Sugar & sweets	124.7	122.5	124.5	124.9	125.6	125.8	126.6	126.1	126.4	127.3	
Beverages, nonalcoholic	113.5	122.4	113.3	114.0	114.3	114.2	115.2	114.5	113.1	115.7	
Apparel											
Apparel, commodities less footwear	122.8	114.6	121.8	118.8	120.5	125.8	127.4	126.4	123.8	122.0	
Footwear	117.4	113.1	117.3	118.1	116.3	118.6	120.5	118.6	118.4	117.3	
Tobacco & smoking products	181.5	174.1	180.9	185.7	185.6	185.8	185.9	187.2	190.5	195.8	
Beverages, alcoholic	129.3	128.2	129.3	129.9	130.2	130.8	131.0	130.9	130.9	137.3	

1/ Beef, veal, lamb, pork, & processed meat. 2/ Includes butter. 3/ Excludes butter.

Information contact: Ann Duncan (202) 219-0313.

Table 7.—Producer Price Indexes, U.S. Average (Not Seasonally Adjusted)

	Annual			1990						1991
	1988	1989	1990 P	Jan	Aug	Sept R	Oct	Nov	Dec	Jan
	1982 = 100									
Finished goods 1/	108.0	113.6	119.2	117.6	119.3	120.4	122.3	122.9	121.9	121.9
Consumer foods	112.6	118.7	124.4	123.9	124.9	124.2	124.6	125.1	124.1	124.6
Fresh fruit	113.6	113.2	117.3	112.1	120.7	117.6	117.3	121.1	119.5	125.0
Fresh & dried vegetables	105.6	116.7	118.1	101.5	98.0	94.3	101.5	117.0	95.7	97.0
Dried fruit	90.1	103.0	98.5	105.2	105.0	106.3	110.0	110.4	110.5	110.3
Canned fruit & juice	120.2	122.7	126.9	124.3	128.1	128.6	127.8	125.1	125.1	128.2
Frozen fruit & juice	129.8	123.9	138.9	129.3	146.4	139.9	137.0	118.1	118.3	113.0
Fresh veg. excl. potatoes	100.4	103.9	107.8	104.0	79.0	79.4	96.2	117.7	87.2	89.3
Canned veg. & juices	108.3	118.6	118.7	117.9	115.2	115.4	114.4	114.5	114.0	114.8
Frozen vegetables	108.6	115.5	118.5	117.8	118.3	118.5	131.0	118.9	119.0	119.3
Potatoes	113.9	153.6	157.3	162.0	161.9	156.4	121.6	129.4	135.5	134.0
Eggs	98.8	119.8	117.8	104.8	114.4	112.6	121.6	125.0	124.5	140.0
Bakery products	126.4	135.4	140.9	138.7	141.0	141.9	142.4	142.4	142.6	144.4
Meats	99.9	104.8	118.9	110.8	119.8	117.2	119.5	119.6	119.6	117.5
Beef & veal	101.4	108.9	118.0	113.1	116.2	114.1	117.4	119.7	121.2	117.6
Pork	95.0	97.7	119.7	107.2	126.2	121.0	124.0	120.7	119.6	117.7
Processed poultry	111.6	120.4	113.8	107.1	114.4	116.7	110.0	108.6	108.6	108.0
Fish	148.7	142.9	148.6	148.5	138.9	140.0	143.6	157.7	160.2	166.7
Dairy products	102.2	110.6	117.2	120.5	120.2	119.0	117.4	114.9	112.2	111.5
Processed fruits & vegetables	113.8	119.9	124.8	122.4	125.8	124.8	124.2	120.7	120.2	119.8
Shortening & cooking oil	118.8	116.6	123.2	117.0	129.4	127.3	122.7	118.2	120.4	119.8
Consumer finished goods less foods	103.1	108.9	115.2	113.2	115.1	117.7	120.8	121.3	119.8	119.4
Beverages, alcoholic	111.8	115.2	117.2	115.5	118.8	117.3	117.4	117.4	117.0	124.3
Soft drinks	114.3	177.7	122.3	122.1	121.8	121.7	122.4	122.6	123.0	124.9
Apparel	111.7	114.5	117.4	118.8	118.0	118.1	118.0	117.9	117.3	117.8
Footwear	115.1	120.8	125.6	124.2	125.8	126.1	126.1	125.8	126.1	126.5
Tobacco products	171.9	194.8	221.5	212.3	224.3	225.0	224.8	230.4	236.4	237.6
Intermediate materials 2/	107.1	112.0	114.5	113.4	114.4	116.3	117.8	117.8	116.7	116.4
Materials for food manufacturing	106.0	112.7	117.9	115.5	120.4	118.8	118.8	115.0	118.4	115.4
Flour	105.7	114.8	103.6	113.4	98.5	94.8	93.8	92.0	92.6	91.3
Refined sugar 3/	108.9	118.2	122.7	122.4	122.6	123.1	123.1	123.0	122.9	122.9
Crude vegetable oils	116.6	103.1	115.7	100.2	128.4	124.1	115.2	105.0	111.2	109.4
Crude materials 4/	96.0	103.1	108.9	106.5	110.2	115.1	115.3	118.8	110.5	113.6
Foodstuffs & feedstuffs	106.1	111.2	113.2	113.5	113.2	110.8	110.8	108.8	108.6	107.4
Fruits & vegetables 5/	108.5	114.8	117.2	139.1	107.4	104.0	107.9	118.2	105.7	108.8
Grains	97.9	106.4	97.5	100.8	92.1	88.3	85.8	85.1	88.0	85.9
Livestock	103.3	106.1	115.6	110.7	117.8	113.3	116.5	113.9	114.3	122.9
Poultry, live	121.5	128.8	118.6	108.9	122.1	128.9	110.2	108.3	104.2	110.4
Fibers, plant & animal	98.4	107.8	117.8	104.8	125.1	118.6	116.4	115.0	116.9	115.2
Fluid milk	89.4	98.8	101.3	114.7	105.5	106.0	104.8	91.7	87.5	84.6
Oilseeds	134.0	123.8	111.8	106.1	114.8	120.1	119.8	111.0	115.8	109.6
Tobacco, leaf	87.2	93.8	98.0	93.7	93.1	100.9	98.9	98.9	98.9	100.2
Sugar, raw cane	111.0	115.5	119.2	118.9	119.6	119.7	119.3	119.4	117.2	114.5
All commodities	106.0	112.2	115.3	114.0	116.5	118.4	120.8	120.1	118.6	116.9
Industrial commodities	106.3	111.6	115.8	114.1	115.9	118.4	121.3	120.6	118.9	119.3
All foods 6/	111.5	117.8	123.2	122.8	124.0	122.9	123.0	123.6	122.5	122.8
Farm products & processed foods & feeds	110.0	115.4	118.6	118.3	119.1	117.8	118.1	117.4	117.0	117.0
Farm products	104.9	110.9	112.2	114.9	111.4	109.2	109.8	108.3	107.8	106.9
Processed foods & feeds 6/	112.7	117.8	121.0	120.2	123.0	122.4	122.2	121.9	121.7	122.1
Cereal & bakery products	123.0	131.1	134.1	133.2	134.2	133.7	134.2	134.0	134.3	135.4
Sugar & confectionery	114.7	120.1	123.1	121.1	123.7	123.8	123.0	125.0	124.0	126.2
Beverages	114.3	118.4	120.8	119.7	120.8	120.8	120.7	120.8	120.7	124.3

1/ Commodities ready for sale to ultimate consumer. 2/ Commodities requiring further processing to become finished goods. 3/ All types & sizes of refined sugar. 4/ Products entering market for the first time that have not been manufactured at that point. 5/ Fresh & dried. 6/ Includes all raw, intermediate, & processed foods (excludes soft drinks, alcoholic beverages, & manufactured animal feeds). R = revised.

Information contact: Ann Duncan (202) 219-0313.

Farm-Retail Price Spreads

Table 8.—Farm-Retail Price Spreads

	Annual			1990						1991
	1988	1989	1990 P	Jan	Aug	Sept	Oct	Nov	Dec	Jan
Market basket 1/										
Retail cost (1982-84=100)	118.5	124.6	133.5	132.2	134.0	134.1	134.8	135.2	135.4	137.0
Farm value (1982-84=100)	100.5	107.1	113.2	118.5	113.8	112.0	110.7	110.0	106.5	109.3
Farm-retail spread (1982-84=100)	125.1	134.1	144.4	139.5	144.5	146.0	147.5	148.7	150.8	153.3
Farm value—retail cost (%)	30.2	30.1	29.7	31.4	29.8	29.3	28.8	28.5	27.6	27.7
Meat products										
Retail cost (1982-84=100)	112.2	116.7	126.5	122.3	130.5	131.0	131.7	133.1	133.6	133.5
Farm value (1982-84=100)	99.5	103.3	116.8	111.2	120.2	114.9	119.0	116.5	114.3	114.4
Farm-retail spread (1982-84=100)	125.2	130.4	140.6	133.7	141.1	147.5	144.8	150.1	153.4	153.1
Farm value—retail cost (%)	44.9	44.6	46.0	46.1	48.7	44.4	45.7	44.3	43.3	43.4
Dairy products										
Retail cost (1982-84=100)	108.4	115.6	126.5	125.5	127.3	127.6	128.8	128.1	126.7	125.2
Farm value (1982-84=100)	90.8	99.1	101.9	115.2	105.0	105.6	99.2	95.7	88.8	86.7
Farm-retail spread (1982-84=100)	124.7	130.6	149.2	135.6	147.8	147.9	155.7	157.0	161.7	180.7
Farm value—retail cost (%)	40.1	41.1	38.6	43.9	39.6	39.7	37.0	35.9	33.6	33.2
Poultry										
Retail cost (1982-84=100)	120.7	132.7	132.5	128.6	133.6	134.6	133.7	130.5	129.7	131.3
Farm value (1982-84=100)	110.2	117.1	107.6	100.6	109.3	115.1	99.0	97.2	95.3	100.2
Farm-retail spread (1982-84=100)	132.8	150.6	161.1	160.9	181.6	157.1	173.7	168.8	169.3	187.1
Farm value—retail cost (%)	48.9	47.2	43.5	41.9	43.8	46.7	39.8	39.9	39.3	40.8
Eggs										
Retail cost (1982-84=100)	93.6	118.5	124.1	143.9	119.6	120.6	125.5	128.5	128.7	139.8
Farm value (1982-84=100)	78.7	107.5	108.0	135.4	100.0	105.9	114.3	113.8	120.8	126.5
Farm-retail spread (1982-84=100)	123.9	138.1	153.2	159.1	154.7	147.1	145.7	155.0	142.8	163.7
Farm value—retail cost (%)	52.7	58.3	55.9	60.5	53.7	56.4	58.5	56.9	60.3	58.1
Cereal & bakery products										
Retail cost (1982-84=100)	122.1	132.4	140.0	136.9	141.4	141.6	141.9	141.7	142.4	144.3
Farm value (1982-84=100)	92.7	101.7	90.5	101.1	85.7	81.5	78.7	77.8	78.6	77.7
Farm-retail spread (1982-84=100)	128.2	136.7	146.9	141.9	149.2	150.0	150.7	150.6	151.3	153.8
Farm value—retail cost (%)	9.3	9.4	7.9	9.0	7.4	7.0	6.6	6.7	6.8	6.6
Fresh fruits										
Retail cost (1982-84=100)	145.4	154.7	174.8	177.3	173.1	171.9	167.2	169.3	176.6	198.3
Farm value (1982-84=100)	118.5	108.5	128.2	131.6	121.2	126.7	128.1	150.8	132.4	203.5
Farm-retail spread (1982-84=100)	158.7	179.0	195.9	198.4	197.0	192.7	185.2	177.9	197.0	195.9
Farm value—retail cost (%)	25.3	22.2	23.2	23.5	22.1	23.3	24.2	26.1	23.7	32.4
Fresh vegetables										
Retail costs (1982-84=100)	129.3	143.1	151.1	176.0	139.8	137.3	142.2	149.5	144.0	159.9
Farm value (1982-84=100)	105.8	123.3	124.2	202.3	108.2	98.8	100.2	108.2	105.3	115.0
Farm-retail spread (1982-84=100)	141.3	153.2	165.0	163.0	156.0	157.1	163.8	170.7	163.9	183.0
Farm value—retail cost (%)	27.8	29.3	27.9	38.8	26.3	24.4	23.9	24.6	24.8	24.4
Processed fruits & vegetables										
Retail cost (1982-84=100)	117.6	125.0	132.7	125.1	135.0	135.0	134.3	132.8	131.6	131.5
Farm value (1982-84=100)	136.8	133.8	147.2	133.3	148.6	151.0	148.7	147.8	140.3	120.7
Farm-retail spread (1982-84=100)	111.7	122.3	128.1	122.5	130.7	130.0	129.5	128.1	128.9	134.9
Farm value—retail costs (%)	27.6	25.4	26.4	25.3	26.2	26.6	26.5	26.5	25.3	21.8
Fats & oils										
Retail cost (1982-84=100)	113.1	121.2	126.3	123.5	127.4	128.2	128.1	128.8	131.0	132.4
Farm value (1982-84=100)	103.0	95.8	106.2	92.0	113.5	109.8	105.0	100.4	102.5	101.7
Farm-retail spread (1982-84=100)	116.8	130.6	133.7	134.8	132.5	135.0	136.3	139.2	141.5	143.7
Farm value—retail cost (%)	24.5	21.2	22.6	20.2	24.0	23.0	22.2	21.0	21.0	20.7
	Annual			1990						1991
	1988	1989	1990 P	Jan	Aug	Sept	Oct	Nov	Dec	Jan
Beef, Choice										
Retail price 2/ (ctn./lb.)	250.3	265.7	281.0	274.4	280.6	280.6	282.7	291.6	295.3	294.9
Wholesale value 3/ (cts.)	169.4	178.8	189.6	187.1	187.1	186.8	192.2	197.6	199.4	192.6
Net farm value 4/ (cts.)	148.3	157.6	168.4	167.6	168.7	166.7	171.0	174.7	174.7	170.2
Farm-retail spread (cts.)	102.0	108.1	112.0	106.8	113.8	113.9	111.7	118.9	120.8	124.7
Wholesale-retail 5/ (cts.)	80.9	88.9	91.4	87.3	93.5	94.0	90.5	94.0	85.9	102.3
Farm-wholesale 6/ (cts.)	21.1	19.2	21.2	19.5	20.4	19.9	20.8	22.9	24.7	22.4
Farm value—retail price (%)	59	59	60	61	59	59	61	60	59	58
Pork										
Retail price 2/ (cts./lb.)	183.4	182.9	212.6	195.1	224.9	220.8	223.2	222.9	223.2	216.1
Wholesale value 3/ (cts.)	101.0	99.2	118.3	104.8	120.5	120.7	124.4	119.7	117.5	109.7
Net farm value 4/ (cts.)	69.4	70.4	87.2	76.8	90.4	88.0	91.2	79.1	77.3	81.4
Farm-retail spread (cts.)	114.0	112.5	125.4	118.5	134.5	132.8	132.0	143.8	145.9	134.7
Wholesale-retail 5/ (cts.)	82.4	83.7	94.3	90.3	104.4	100.1	98.8	103.2	105.7	106.4
Farm-wholesale 6/ (cts.)	31.6	28.8	31.1	28.2	30.1	32.7	33.2	40.8	40.2	28.3
Farm value—retail price (%)	38	38	41	39	40	40	41	35	35	38

1/ Retail costs are based on CPI-U of retail prices for domestically produced farm foods, published monthly by BLS. The farm value is the payment for the quantity of farm equivalent to the retail unit, less allowance for byproduct. Farm values are based on prices at first point of sale & may include marketing charges such as grading & packing for some commodities. The farm-retail spread, the difference between the retail price & the farm value, represents charges for assembling, processing, transporting, distributing. 2/ Weighted average price of retail cuts from pork & choice yield grade 3 beef. Prices from BLS. 3/ Value of wholesale (boxed beef) & wholesale cuts (pork) equivalent to 1 lb. of retail cuts adjusted for transportation costs & byproduct values. 4/ Market value to producer for live animal equivalent to 1 lb. of retail cuts, minus value of byproducts. 5/ Charges for retailing & other marketing services such as wholesaling, and in-city transportation. 6/ Charges for livestock marketing, processing, & transportation.

Information contact: Denis Dunham (202) 219-0870, Larry Duewer (202) 219-0712.

Table 9.—Price Indexes of Food Marketing Costs

(See the March 1991 issue.)
 Information contact: Denis Dunham (202) 219-0870.

Livestock & Products

Table 10.—U.S. Meat Supply & Use

	Beg. stocks	Produc- tion 1/	Imports	Total supply	Exports	Ending stocks	Consumption		Primary market price 3/
							Total	Per capita 2/	
Million pounds 4/									
Beef									
1988	388	23,589	2,379	26,354	680	422	25,252	72.3	71.19
1989	422	23,087	2,175	25,684	1,023	335	24,328	68.9	73.86
1990	335	22,736	2,356	25,427	1,006	397	24,024	67.5	78.56
1991 F	397	23,088	2,270	25,755	1,040	315	24,400	68.0	76.82
Pork									
1988	360	15,684	1,137	17,181	195	437	16,549	62.2	43.39
1989	437	15,813	896	17,146	262	313	16,571	51.7	44.03
1990	313	15,345	897	16,555	239	296	16,020	49.5	54.45
1991 F	296	15,879	945	16,920	240	375	16,305	50.0	50-66
Veal 5/									
1988	4	396	27	427	10	5	412	1.4	89.85
1989	5	355	0	360	0	4	356	1.2	91.84
1990	4	330	0	334	0	6	328	1.1	96.51
1991 F	6	359	0	365	0	4	361	1.2	97-103
Lamb & mutton									
1988	.8	335	51	394	1	6	387	1.4	68.28
1989	.9	347	63	416	2	6	406	1.6	67.32
1990	.8	364	59	431	3	8	420	1.5	56.54
1991 F	8	366	56	429	2	7	420	1.6	51-67
Total red meat									
1988	758	40,004	3,594	44,358	888	870	42,000	127.2	—
1989	870	39,602	3,134	43,806	1,287	680	41,659	123.2	—
1990	860	38,775	3,312	42,747	1,248	707	40,792	119.6	—
1991 F	707	39,492	3,270	43,459	1,282	701	41,496	120.7	—
Broilers									
1988	25	16,187	9	16,212	765	36	16,410	62.6	58.3
1989	38	17,428	0	17,464	814	38	16,612	66.8	59.0
1990	38	18,888	0	18,706	1,143	26	17,536	69.9	54.8
1991 F	26	19,727	0	19,753	1,025	30	18,698	73.9	51-67
Mature chicken									
1988	188	633	0	821	28	157	639	2.6	—
1989	157	575	0	731	24	189	518	2.1	—
1990	189	565	0	754	25	224	505	2.0	—
1991 F	224	553	0	778	26	225	527	2.1	—
Turkeys									
1988	266	3,960	0	4,228	51	250	3,926	15.9	81.2
1989	250	4,276	0	4,528	41	236	4,250	17.1	66.7
1990	236	4,876	0	4,912	54	306	4,551	18.1	63.2
1991 F	306	4,912	0	5,218	54	260	4,004	19.4	59-65
Total poultry									
1988	479	20,780	0	21,259	842	442	19,975	81.1	—
1989	442	22,280	0	22,722	878	463	21,380	85.9	—
1990	463	23,908	0	24,372	1,222	557	22,593	90.0	—
1991 F	557	25,192	0	25,748	1,105	615	24,128	95.4	—
Red meat & poultry									
1988	1,237	60,784	3,594	65,615	1,728	1,312	62,574	208.3	—
1989	1,312	61,682	3,134	66,328	2,165	1,123	63,039	209.2	—
1990	1,123	62,683	3,312	67,119	2,470	1,284	63,385	209.6	—
1991 F	1,264	64,684	3,270	69,217	2,387	1,216	65,814	216.0	—

1/ Total including farm production for red meats & federally inspected plus nonfederally inspected for poultry. 2/ Retail weight basis. (The beef carcass-to-retail conversion factor was .71 for 1987, & 70.5 for 1988-90.) 3/ Dollars per cwt for red meat; cents per pound for poultry. Beef: Medium # 1, Nebraska Direct 1,100-1,300 lb.; pork: barrows & gilts, 7 markets; veal: farm price of calves; lamb & mutton: Choice slaughter lambs, San Angelo; broilers: wholesale 12-city average; turkeys: wholesale NY 8-18 lb. young hens. 4/ Carcass weight for red meats & certified ready-to-cook for poultry. 5/ Beginning 1989 veal trade no longer reported separately. F = forecast. — = not available.

Table 11.—U.S. Egg Supply & Use

	Beg. stocks	Pro- duc- tion	Im- por- ts	Total supply	Ex- ports	Hatch- ing use	Ending stocks	Consumption		
								Total	Per capita	Wholesale price*
	Million dozen							Cts./doz.		
1986	10.7	5,706.3	13.7	5,790.7	101.6	566.8	10.4	5,111.9	253.8	71.1
1987	10.4	5,868.2	5.8	5,884.2	111.2	599.1	14.4	5,159.5	253.8	61.6
1988	14.4	5,784.2	5.3	5,803.9	141.8	805.9	15.2	5,041.0	245.8	62.1
1989	15.2	5,597.8	25.2	5,638.2	91.8	842.9	10.7	4,893.0	236.0	81.9
1990	10.7	5,650.2	9.1	5,878.9	100.5	875.8	11.8	4,890.9	233.8	82.2
1991 F	11.6	5,715.0	7.0	5,733.6	104.0	720.0	12.0	4,897.6	232.3	74-80

* Cartoned grade A large eggs, New York. F = forecast.

Information contact: Maxine Davis (202) 219-0767.

Table 12.—U.S. Milk Supply & Use¹

	Pro- duc- tion	Commercial			Total commer- cial supply	CCC net re- movals	Commercial			All milk price 2/
		Farm use	Farm market- ings	Beg. stock	Im- por- ts		Ending stocks	Disap- pear- ence		
Billion pounds										
1983	139.6	2.4	137.2	4.6	2.6	144.4	16.8	5.2	122.4	13.58
1984	135.4	2.9	132.4	5.2	2.7	140.4	8.6	4.9	126.8	13.48
1985	143.0	2.5	140.6	4.9	2.8	148.3	13.2	4.8	130.6	12.75
1986	143.1	2.4	140.7	4.6	2.7	148.1	10.6	4.2	133.3	12.51
1987	142.7	2.3	140.5	4.2	2.5	147.1	8.7	4.8	135.8	12.64
1988	145.2	2.2	142.9	4.6	2.4	150.0	8.9	4.3	136.8	12.24
1989	144.2	2.1	142.1	4.3	2.5	148.9	9.0	4.1	135.8	13.54
1990 F	148.3	2.1	148.2	4.1	2.7	153.0	8.5	5.2	139.3	13.75

1/ Milkfat basis. Totals may not add because of rounding. 2/ Delivered to plants & dealers; does not reflect deductions. F = forecast.

Information contact: Jim Miller (202) 219-0770.

Table 13.—Poultry & Eggs

	Annual			1990						1991	
	1988	1989	1990	Jan	Aug	Sept	Oct	Nov	Dec	Jan	
Broilers											
Federally inspected slaughter, certified (mil. lb.)	16,124.4	17,334.2	18,558	1,519.6	1,091.9	1,421.4	1,768.6	1,584.3	1,441.5	1,699.3	
Wholesale price, 12-city (cts./lb.)	56.3	59.0	54.8	51.7	54.0	57.4	48.8	48.0	49.6	51.7	
Price of grower feed (\$/ton)	219	237	218.3	224	221	220	207	209	213	213	
Broiler-feed price ratio 1/	3.1	3.0	3.0	2.7	3.0	3.2	2.8	2.7	2.7	2.9	
Stocks beginning of period (mil. lb.)	24.8	35.9	38.3	38.3	30.3	25.9	23.9	26.9	27.7	26.1	
Broiler-type chicks hatched (mil.) 2/	5,802.4	6,944.3	8,300.6	518.3	540.8	508.6	510.3	490.2	647.1	543.9	
Turkeys											
Federally inspected slaughter, certified (mil. lb.)	3,923.4	4,174.8	4,560.7	319.0	444.0	382.9	478.4	446.8	328.7	378.6	
Wholesale price, Eastern U.S..	81.2	86.7	83.2	55.6	66.6	80.0	76.2	73.7	66.1	63.5	
8-18 lb. young hens (cts./lb.)	243	251	238.4	239	235	239	234	239	237	234	
Price of turkey grower feed (\$/ton)	3.0	3.2	3.2	3.0	3.4	3.4	3.8	3.8	3.0	2.9	
Turkey-feed Price ratio 1/	268.2	249.7	235.9	235.9	541.7	593.1	623.6	625.1	338.4	306.4	
Poults placed in U.S. (mil.)	261.4	289.0	304.2	24.7	25.6	19.7	21.5	21.6	22.8	26.0	
Eggs											
Farm production (mil.)	69,410	67,174	67,910	5,702	5,719	5,534	5,785	5,689	5,855	5,811	
Average number of layers (mil.)	277	269	270	272	267	268	270	271	272	273	
Rate of lay (eggs per layer on farm)	251	250	251.7	21.0	21.4	20.8	21.6	21.0	21.5	21.3	
Cartoned price, New York, grade A large (cts./doz.) 3/	62.1	81.9	82.2	92.4	80.3	82.2	88.5	86.5	92.5	87.5	
Price of laying feed (\$/ton)	202	209	202	199	205	204	199	200	199	198	
Egg-feed price ratio 1/	5.3	6.7	6.9	6.4	6.4	6.7	7.4	7.3	7.7	8.0	
Stocks, first of month											
Shell (mil. doz.)	1.29	0.27	0.38	0.38	0.87	0.57	0.54	0.33	0.48	0.45	
Frozen (mil. doz.)	13.1	14.9	10.3	10.3	13.0	13.0	12.8	12.8	13.0	11.2	
Replacement chicks hatched (mil.)	366	384	400.8	32.0	33.0	32.7	32.1	30.0	31.1	33.1	

1/ Pounds of feed equal in value to 1 dozen eggs or 1 lb. of broiler or turkey liveweight. 2/ Placement of broiler chicks is currently reported for 15 States only; henceforth, hatch of broiler-type chicks will be used as a substitute. 3/ Price of cartoned eggs to volume buyers for delivery to retailers.

Information contact: Maxine Davis (202) 219-0767.

Table 14.—Dairy

	Annual			1990					1991	
	1988	1989	1990	Jan	Aug	Sept	Oct	Nov	Dec	Jan
Milk prices, Minnesota-Wisconsin, 3.5% fat (\$/cwt) 1/	11.03	12.37	12.21	13.94	13.09	12.50	10.48	10.25	10.19	10.18
Wholesale prices										
Butter, grade A Chl. (cts./lb.)	132.5	127.9	102.1	110.8	98.9	98.9	98.9	98.9	98.9	97.2
Am. cheese, Wis. assembly pt. (cts./lb.)	123.8	138.8	136.7	152.3	150.3	142.6	121.2	112.0	112.7	111.4
Nonfat dry milk (cts./lb.) 2/	80.2	105.6	100.6	88.2	112.1	92.0	88.8	88.8	88.2	85.2
USDA net removals										
Total milk equiv. (mil. lb.) 3/	8,856.2	8,967.9	8,540.6	1,490.9	324.5	119.2	249.0	273.9	803.4	1,757.3
Butter (mil. lb.)	312.9	413.4	400.3	71.8	15.8	5.8	11.8	10.8	30.5	77.5
Am. cheese (mil. lb.)	238.1	37.4	21.5	0	0	0	0	4.5	17.0	15.5
Nonfat dry milk (mil. lb.)	267.5	0	117.8	2.9	0	15.9	22.8	34.1	42.8	55.4
Milk										
Milk prod. 21 States (mil. lb.)	123,518	122,531	125,714	10,389	10,478	9,973	10,223	9,998	10,487	10,657
Milk per cow (lb.)	14,291	14,369	14,768	1,217	1,233	1,171	1,200	1,171	1,225	1,252
Number of milk cows (1,000)	8,643	8,526	8,513	8,836	8,499	8,516	8,516	8,540	8,547	8,511
U.S. milk production (mil. lb.)	145,152	144,230	148,284	12,274	6/ 12,324	6/ 11,732	6/ 12,088	6/ 11,821	6/ 12,377	6/ 12,591
Stocks, beginning										
Total (mil. lb.)	7,440	8,234	8,705	8,795	13,552	13,578	13,092	12,895	12,688	12,990
Commercial (mil. lb.)	4,648	4,289	4,131	4,131	5,638	5,673	5,308	5,151	5,099	5,210
Government (mil. lb.)	2,794	3,945	4,664	4,884	7,918	8,003	7,785	7,744	7,589	7,780
Imports, total (mil. lb.) 3/	2,394	2,499	2,690	103	208	222	248	202	208	—
Commercial disappearance (mil. lb.)	136,805	135,830	139,291	11,394	12,095	11,930	12,068	11,891	11,496	—
Butter										
Production (mil. lb.)	1,207.5	1,273.5	1,285.7	127.1	83.8	84.8	105.0	111.0	116.5	142.1
Stocks, beginning (mil. lb.)	143.2	214.7	258.2	258.2	420.8	427.9	412.3	413.0	407.8	410.1
Commercial disappearance (mil. lb.)	909.8	854.1	898.8	55.1	67.5	86.3	92.4	97.9	85.5	—
American cheese										
Production (mil. lb.)	2,756.0	2,672.6	2,891.3	231.7	228.3	220.5	238.0	235.4	251.8	247.1
Stocks, beginning (mil. lb.)	370.4	293.0	238.2	238.2	362.3	361.0	350.7	338.7	334.8	347.4
Commercial disappearance (mil. lb.)	2,570.0	2,681.6	2,781.6	209.1	232.1	231.3	248.6	238.0	229.1	—
Other cheese										
Production (mil. lb.)	2,815.4	2,941.3	3,148.7	252.1	258.6	256.2	266.8	253.5	264.3	254.8
Stocks, beginning (mil. lb.)	89.7	104.7	93.2	93.2	124.0	117.0	111.1	107.1	102.0	110.8
Commercial disappearance (mil. lb.)	3,034.5	3,208.9	3,408.2	259.8	290.6	285.0	298.0	286.4	279.0	—
Nonfat dry milk										
Production (mil. lb.)	979.7	874.7	888.9	51.4	62.9	50.8	55.2	71.1	79.0	82.8
Stocks, beginning (mil. lb.)	177.2	53.1	49.5	49.5	108.7	123.8	121.2	129.2	143.8	161.8
Commercial disappearance (mil. lb.)	734.3	873.0	888.3	58.7	48.0	42.2	32.9	37.3	36.5	—
Frozen dessert										
Production (mil. gal.) 4/	1,248.0	1,214.0	1,187.2	79.5	118.0	94.0	91.3	78.3	74.1	78.8
	Annual			1990					1990	
	1988	1989	1990	II	III	IV	I	II P	III P	IV P
Milk production (mil. lb.)	145,152	144,230	148,284	37,702	35,157	34,939	36,740	38,828	36,832	36,286
Milk per cow (lb.)	14,145	14,244	14,842	3,727	3,481	3,451	3,827	3,820	3,620	3,575
No. of milk cows (1,000)	10,262	10,126	10,127	10,115	10,099	10,126	10,128	10,111	10,119	10,151
Milk-feed price ratio 5/	1.58	1.65	1.72	1.48	1.63	1.92	1.82	1.68	1.76	1.60
Returns over concentrate 5/ costs (\$/cwt milk)	9.05	10.08	10.40	8.96	9.92	12.16	11.30	10.27	10.90	9.30

1/ Manufacturing grade milk. 2/ Prices paid f.o.b. Central States production area. 3/ Milk equivalent, fat basis. 4/ Hard ice cream, ice milk, & hard sherbet. 5/ Based on average milk price after adjustment for price support deductions. 6/ Estimated. P = preliminary. — = not available.

Information contact: LaVerne T. Williams (202) 219-0770.

Table 15.—Wool

	Annual			1989		1990			
	1988	1989	1990	III	IV	I	II	III	IV
U.S. wool price, (cts./lb.) 1/	438	370	256	350	328	289	272	238	227
Imported wool price, (cts./lb.) 2/	372	354	287	309	318	327	312	281	270
U.S. mill consumption, scoured 3/									
Apparel wool (1,000 lb.)	117,069	112,998	114,100	25,983	24,921	29,948	29,998	25,631	28,523
Carpet wool (1,000 lb.)	15,633	14,122	13,470	3,865	2,984	3,779	2,923	3,771	2,977

1/ Wool price delivered at U.S. mills, clean basis, Graded Territory 84's (20.00-22.04 microns) staple 2-3/4" & up. 2/ Wool price, Charleston, SC warehouse, clean basis, Australian 80/82's, type 84A (24 micron). Duty since 1982 has been 10.0 cents. 3/ Beginning 1990 mill consumption reported only on a quarterly basis.

Information contact: John Lawler (202) 219-0840.

Table 16.—Meat Animals

	Annual			1990						1991
	1988	1989	1990	Jan	Aug	Sept	Oct	Nov	Dec	Jan
Cattle on feed (7 States)										
Number on feed (1,000 head) 1/	8,411	8,045	8,378	8,378	7,003	8,990	7,670	8,729	9,129	9,137
Placed on feed (1,000 head)	20,654	20,834	21,215	1,908	1,735	2,204	2,751	2,007	1,478	1,791
Marketings (1,000 head)	19,918	19,422	19,238	1,644	1,688	1,445	1,605	1,512	1,349	1,707
Other disappearance (1,000 head)	1,202	1,079	1,218	114	82	79	87	95	121	118
Beef steer-corn Price ratio.										
Omaha 2/	31.5	30.3	32.8	34.2	30.8	34.5	36.5	37.3	36.5	35.3
Hog-corn price ratio, Omaha 2/	19.8	18.4	23.1	21.8	23.1	25.1	27.0	23.2	22.0	23.0
Market prices (\$/cwt.)										
Slaughter cattle										
Choice steers, Omaha 1,000-1,100 lb.	69.54	72.52	77.40	78.73	78.22	75.75	77.50	79.03	80.88	78.95
Choice steers, Neb. Direct, 1,100-1,300 lb.	69.54	72.52	77.40	78.14	77.18	77.60	79.33	81.06	81.42	79.35
Boning utility cows, Sioux Falls	47.21	48.98	63.60	49.89	53.81	55.41	50.58	48.75	60.35	49.41
Feeder cattle										
Medium no. 1, Oklahoma City 600-700 lb.	84.72	86.66	92.15	87.34	96.50	94.41	92.14	93.66	95.67	94.21
Slaughter hogs										
Barrows & gilts, 7-markets	43.39	44.03	54.45	47.94	56.05	55.10	57.15	49.70	48.15	51.00
Feeder pigs										
S. Mo. 40-50 lb. (per head)	38.08	33.63	51.45	44.58	45.85	45.91	52.33	46.22	49.63	48.50
Slaughter sheep & lambs										
Lambs, Choice, San Angelo	68.26	57.32	55.54	54.80	51.20	51.75	52.50	50.42	48.08	47.83
Ewes, Good, San Angelo	38.88	38.58	35.21	38.30	38.60	32.88	32.00	33.83	34.67	31.94
Feeder lambs										
Cholca, San Angelo	90.89	79.85	62.95	72.10	68.30	55.75	55.90	57.83	59.17	50.83
Wholesale meat prices, Midwest										
Boxed beef cut-out value*	110.50	114.78	123.21	121.75	121.52	121.18	124.96	128.32	129.48	125.04
Canner & cutter cow beef	87.77	94.43	99.96	99.89	105.22	101.03	98.01	91.11	97.32	95.67
Pork loins, 14-16 lb. 3/	97.49	101.09	117.52	101.38	119.56	121.84	113.71	98.94	103.50	103.60
Pork bellies, 12-14 lb.	41.25	34.14	63.80	48.85	51.08	51.31	59.83	60.57	56.58	64.11
Hams, skinned, 14-17 lb.	71.03	60.30	87.70	68.44	NQ	101.75	107.24	108.00	86.13	73.00
All fresh beef retail price 4/	224.81	238.97	254.99	247.81	254.71	258.39	259.36	263.40	265.75	261.30
Commercial slaughter (1,000 head)**										
Cattle	35,081	33,918	33,220	2,851	2,983	2,815	2,980	2,701	2,451	2,881
Steers	17,344	16,536	16,577	7,361	1,508	1,275	1,401	1,302	1,227	1,416
Heifers	10,754	10,406	10,089	829	926	842	919	787	694	858
Cows	8,338	8,318	5,910	606	486	444	579	559	485	557
Bulls & steags	644	657	644	55	63	54	61	53	45	50
Calves	2,507	2,172	1,807	181	152	138	162	155	142	154
Sheep & lambs	5,294	5,486	5,649	489	482	439	507	481	464	508
Hogs	87,794	88,691	85,118	7,605	7,301	8,898	7,739	7,538	7,354	7,652
Commercial production (mil. lb.)										
Beef	23,424	22,974	22,618	1,932	2,062	1,813	2,042	1,842	1,681	1,968
Veal	387	344	321	27	28	26	31	29	27	31
Lamb & mutton	329	341	360	32	30	27	32	30	30	33
Pork	15,823	15,759	15,291	1,363	1,309	1,228	1,389	1,374	1,342	1,397
	Annual			1989		1990			1991	
	1988	1989	1990	III	IV	I	II	III	IV	I
Cattle on feed (13 States)										
Number on feed (1,000 head) 1/	10,114	9,688	9,843	8,680	8,276	9,943	10,063	8,761	9,092	10,937
Placed on feed (1,000 head)	24,423	24,469	24,948	5,719	7,306	8,083	5,086	8,333	7,446	—
Marketings (1,000 head)	23,459	22,940	22,561	5,896	6,346	6,578	5,988	6,741	5,254	6/ 5,745
Other disappearance (1,000 head)	1,390	1,274	1,393	227	293	385	400	261	347	—
Hogs & pigs (10 States) 5/										
Inventory (1,000 head) 1/	42,675	43,210	42,200	44,020	45,200	42,200	40,190	42,800	44,410	—
Breeding (1,000 head) 1/	5,435	6,335	5,280	5,565	5,335	5,280	5,250	5,440	5,340	—
Market (1,000 head) 1/	37,240	37,875	36,920	38,455	39,865	36,920	34,940	37,360	39,070	—
Farrowings (1,000 head)	9,370	9,203	8,869	2,324	2,190	2,013	2,458	2,266	6/ 2,252	—
Pig crop (1,000 head)	72,268	71,607	—	18,187	16,890	15,748	19,570	17,922	—	—

1/ Beginning of period. 2/ Bushels of corn equal in value to 100 pounds live weight. 3/ Prior to 1984, 8-14 lb.; 1984 & 1985, 14-17 lb.; beginning 1986, 14-18 lb. 4/ New series estimating the composite price of all beef grades & ground beef sold by retail stores. This new series is in addition to, but does not replace, the series for the retail price of Choice beef that appears in table 8. 5/ Quarters are Dec. of preceding year-Feb. (I), Mar.-May (II), June-Aug. (III), & Sept.-Nov. (IV). 6/ Intentions.

* Classes estimated. NQ = not quote. — = not available.

Note: * This series replaces the Choice steer beef price, 600-700 lb., which was discontinued with the June number. The new number is the value of Choice beef from a yield grade 1-3, 550-700 lb. carcass.

Information contact: Polly Cochran (202) 219-0787.

Crops & Products

Table 17.—Supply & Utilization^{1,2}

	Area			Yield	Production	Total supply	Feed and residual	Other domestic use	Exports	Total use	Ending stocks	Farm price \$/bu.
	Sel aside 3/	Planted	Harvested									
	Mil. acres	Bu./acre	Mil. bu.									
Wheat												
1985/86	18.8	75.6	64.7	37.6	2,424	3,865	284	767	909	1,060	1,905	3.08
1986/87	21.0	72.1	60.7	34.4	2,091	4,017	401	706	999	2,100	1,821	2.42
1987/88	23.0	65.8	56.0	37.7	2,108	3,945	280	806	1,598	2,684	1,281	2.67
1988/89*	22.5	65.5	53.2	34.1	1,812	3,096	157	818	1,419	2,394	702	3.72
1989/90*	9.0	76.6	62.1	32.7	2,037	2,762	160	832	1,233	2,225	536	3.72
1990/91*	7.1	77.3	69.4	39.6	2,739	3,310	450	853	1,050	2,353	957	2.65-2.65
Rice												
1985/86	1.24	2.51	2.49	5,414	134.9	201.8	—	6/ 65.8	66.7	124.5	77.3	6.53
1986/87	1.48	2.38	2.38	5,651	133.4	213.3	—	6/ 77.7	84.2	161.9	51.4	3.75
1987/88	1.57	2.36	2.33	5,555	129.9	184.0	—	6/ 80.4	72.2	152.6	31.4	7.27
1988/89*	1.09	2.93	2.90	5,514	159.0	195.0	—	6/ 82.3	85.9	168.2	26.7	6.83
1989/90*	1.21	2.73	2.69	5,749	154.5	185.4	—	6/ 82.4	76.8	159.2	26.3	7.35
1990/91*	1.03	2.89	2.81	6,507	154.9	186.0	—	6/ 88.8	73.0	181.8	24.2	6.25-6.75
Corn												
1985/86	5.4	83.4	75.2	118.0	8,875	10,534	4,107	1,160	1,227	6,494	4,040	2.23
1986/87	14.3	76.7	68.9	119.4	8,226	12,267	4,701	1,192	1,492	7,325	4,892	1.50
1987/88	23.1	85.2	59.5	119.8	7,131	12,016	4,812	1,229	1,716	7,757	4,259	1.94
1988/89*	20.5	87.7	58.3	84.6	4,929	9,101	3,987	1,245	2,028	7,280	1,930	2.54
1989/90*	10.8	72.3	64.8	116.2	7,525	9,458	4,456	1,290	2,387	6,113	1,344	2.36
1990/91*	10.1	74.2	67.0	118.5	7,933	9,280	4,850	1,320	1,825	7,995	1,286	2.20-2.40
Sorghum												
1985/86	0.8	18.3	16.8	86.8	1,120	1,420	604	28	178	889	551	1.93
1986/87	3.0	16.3	13.9	87.7	938	1,489	536	12	198	746	743	1.37
1987/88	4.1	11.8	10.5	89.4	731	1,474	555	25	231	811	863	1.70
1988/89*	3.0	10.3	9.0	63.8	577	1,238	468	22	310	800	440	2.27
1989/90*	3.3	12.6	11.2	55.4	615	1,055	517	15	304	835	220	2.10
1990/91*	3.0	10.7	9.1	82.9	571	791	500	16	200	715	76	2.05-2.15
Barley												
1985/86	0.7	13.2	11.0	51.0	591	848	333	169	22	523	325	1.98
1986/87	2.1	13.1	12.0	60.8	611	944	298	174	137	508	336	1.81
1987/88	2.9	11.0	9.9	52.4	521	889	254	174	120	548	321	1.81
1988/89*	2.8	9.8	7.8	38.0	290	822	166	180	79	425	196	2.80
1989/90*	2.3	9.2	8.3	48.6	404	614	158	180	84	453	161	2.42
1990/91*	2.6	8.3	7.5	55.9	419	587	176	185	90	450	137	2.10-2.15
Oats												
1985/86	0.1	13.3	8.2	63.7	521	728	460	82	2	544	184	1.23
1986/87	0.8	14.7	6.9	58.3	386	603	395	73	3	471	133	1.21
1987/88	0.8	18.0	6.9	54.0	374	552	358	81	1	440	112	1.58
1988/89*	0.3	13.6	5.5	39.3	218	393	194	100	1	294	98	2.81
1989/90*	0.4	12.1	6.9	54.3	374	638	265	115	1	381	157	1.49
1990/91*	0.2	10.4	5.9	50.1	357	574	330	120	1	451	124	1.10-1.15
Soybeans												
1985/86	0	83.1	61.8	34.1	2,099	2,415	0	1,053	740	1,879	538	5.05
1986/87	0	66.4	58.3	33.3	1,940	2,476	0	1,179	757	2,040	438	4.78
1987/88	0	58.2	57.2	33.9	1,938	2,374	0	1,174	802	2,072	302	5.88
1988/89*	0	58.8	57.4	27.0	1,549	1,855	0	1,058	527	1,673	182	7.42
1989/90*	0	60.8	59.5	32.3	1,924	2,109	0	1,146	623	1,870	239	5.70
1990/91*	0	57.8	56.5	34.0	1,922	2,163	0	1,165	650	1,813	350	5.40-6.00
Soybean oil												
1985/86	—	—	—	—	11,617	12,257	—	10,053	1,257	11,310	947	18.00
1986/87	—	—	—	—	12,783	13,745	—	10,833	1,187	12,020	1,725	15.40
1987/88	—	—	—	—	12,974	8/ 14,895	—	10,930	1,873	12,803	2,092	22.65
1988/89*	—	—	—	—	11,737	8/ 13,967	—	10,591	1,681	12,252	1,715	21.10
1989/90*	—	—	—	—	13,004	8/ 14,741	—	12,083	1,353	13,438	1,305	22.30
1990/91*	—	—	—	—	13,025	8/ 14,350	—	12,000	1,000	13,000	1,350	21.0-23.0
Soybean meal												
1985/86	—	—	—	—	24,951	25,338	—	19,090	8,036	25,125	212	155
1986/87	—	—	—	—	27,758	27,970	—	20,387	7,343	27,730	240	183
1987/88	—	—	—	—	28,060	28,300	—	21,293	8,864	28,147	153	222
1988/89*	—	—	—	—	24,943	25,100	—	19,639	6,268	24,927	173	233
1989/90*	—	—	—	—	27,719	27,900	—	22,658	8,024	27,582	318	174
1990/91*	—	—	—	—	27,822	27,950	—	22,000	5,000	27,600	350	150-170

See footnotes at end of table.

Table 17.—Supply & Utilization, continued

	Area			Production	Total supply 4/	Feed and residual	Other domestic use	Exports	Total use	Ending Stocks	Farm price 5/
	Set Aside 3/	Planted	Harvested	Yield							
	Mil. acres			Lb./acre			Mil. bales				
Cotton 10/											
1985/86	3.6	10.7	10.2	630	13.4	17.6	—	6.4	2.0	8.4	9.4
1986/87	4.2	10.0	9.6	652	9.7	19.1	—	7.4	8.7	14.1	6.0
1987/88	3.9	10.4	10.0	706	14.8	19.8	—	7.8	8.8	14.2	5.8
1988/89*	2.2	12.6	12.0	619	15.4	21.2	—	7.8	8.2	13.9	7.1
1989/90*	3.5	10.6	9.6	814	12.2	19.3	—	8.8	7.7	16.4	3.0
1990/91*	1.9	12.4	11.7	640	15.6	18.6	—	8.4	8.0	18.4	2.3

*March 11, 1991 Supply & Demand Estimates. 1/ Marketing year beginning June 1 for wheat, barley, & oats, August 1 for cotton & rice, September 1 for soybeans, corn, & sorghum, October 1 for soymeal & soyoil. 2/ Conversion factor: Hectares (ha.) = 2.471 acres, 1 metric ton = 2204.622 pounds, 36 7437 bushels of wheat or soybeans, 39 3679 bushels of corn or sorghum, 45 9296 bushels of barley, 68.8944 bushels of oats, 22.046 cwt of rice, & 4.59 480-pound bales of cotton. 3/ Includes diversion, PAK acreage reduction, 50-92, & 80-92 programs. 4/ Includes imports. 5/ Market average. Prices do not include an allowance for loans outstanding & Government purchases. 6/ Residual included in domestic use. 7/ Average of crude soybean oil, Decatur. 8/ Includes 198 million pounds in imports for 1987/88, 138 million in 1988/89, 16 million in 1989/90, & 60 million in 1990/91. 9/ Average of 44 percent, Decatur. 10/ Upland & extra long staple. Stocks estimates based on Census Bureau data, resulting in an unaccounted difference between supply & use estimates & changes in ending stocks. — = not available or not applicable.

Information contact: Commodity Economics Division, Crops Branch (202) 219-0840.

Table 18.—Food Grains

	Marketing year 1/				1990					1991		
	1986/87	1987/88	1988/89	1989/90	Jan	Sept	Oct	Nov	Dec	Jan		
Wholesale prices												
Wheat, No. 1 HRW, Kansas City (\$/bu.) 2/	2.72	2.90	4.17	4.22	4.30	2.83	2.81	2.78	2.78	2.78	2.71	
Wheat, DNS, Minneapolis (\$/bu.) 3/	3.07	3.15	4.36	4.16	4.21	2.84	2.85	2.80	2.82	2.82	2.83	
Rice, S. W. La. (\$/cwt) 4/	10.25	10.25	14.85	16.65	15.40	13.95	13.75	14.50	14.50	14.50	14.10	
Wheat												
Exports (mill. bu.)	1,004	1,592	1,424	1,233	83	109	88	81	81	81	—	
Mill grind (mill. bu.)	756	753	778	759	83	87	75	73	73	73	—	
Wheat flour production (mill. cwt)	335	330	348	347	28	30	33	33	33	33	—	
Rice												
Exports (mill. cwt, rough equiv.)	84.2	72.2	86.9	76.8	7.1	8.6	9.0	8.4	8.4	8.4	—	
Marketing year 1/					1989					1990		
	1987/88	1988/89	1989/90		Mar-May	June-Aug	Sept-Nov		Dec-Feb	Mar-May	June-Aug	Sept-Nov
Wheat												
Stocks, beginning (mill. bu.)	1,821	1,261	702	1,227.7	701.6	1,917.2	1,423.7	943.1	536.5	2,409.5		
Domestic use												
Food (mill. bu.)	721	716	731	185.0	183.1	183.1	180.5	184.3	197.4	211.9		
Seed, feed & residual (mill. bu.) 5/	365	290	261	-2.8	273.9	-12.8	44.9	-44.9	406.0	23.4		
Exports (mill. bu.)	1,598	1,419	1,233	368.0	360.9	328.6	259.7	274.8	268.1	278.0		

1/ Beginning June 1 for wheat & August 1 for rice. 2/ Ordinary protein. 3/ 14% protein. 4/ Long grain, milled basic. 5/ Residual includes feed use. — = not available.

Information contact: Ed Allen & Janet Livezey (202) 219-0840.

Table 19.—Cotton

	Marketing year 1/				1990					1991	
	1986/87	1987/88	1988/89	1989/90	Jan	Sept	Oct	Nov	Dec	Jan	
U.S. price, SLM, 1-1/16 in. (cte./lb.) 2/	63.2	63.1	57.7	69.8	62.2	71.0	70.5	69.5	69.9	70.5	
Northern Europe price, Index (cte./lb.) 3/	62.0	72.7	66.4	82.3	74.9	81.4	81.5	82.7	83.8	83.4	
U.S. M 1-3/32 in. (cte./lb.) 4/	61.8	76.3	69.2	83.8	74.3	81.7	82.4	83.2	84.0	85.5	
U.S. mill consumpt. (1,000 bales)	7,452	7,617	7,782	8,759	754	892	802	887	490	—	
Exports (1,000 bales)	6,864	8,582	8,148	7,804	875	412	377	718	769		
Stocks, beginning (1,000 bales)	9,348	5,026	8,771	7,092	12,514	2,224	3,207	7,498	10,580	11,555	

1/ Beginning August 1. 2/ Average spot market. 3/ Liverpool Cotlook (A) Index; average of five lowest priced of 11 selected growths. 4/ Memphis territory growths. — = not available.

Information contact: Bob Skinner (202) 219-0840.

Table 20.—Feed Grains

	Marketing year 1/				1990					1991 Jan
	1986/87	1987/88	1988/89	1989/90	Jan	Sept	Oct	Nov	Dec	
Wholesale prices										
Corn, no. 2 yellow, 30 day, Chicago (\$/bu.)	1.64	2.14	2.66	2.63	2.39	2.33	2.24	2.33	2.33	2.39
Sorghum, no. 2 yellow, Kansas City (\$/cwt)	2.73	3.40	4.16	4.18	4.00	3.89	3.79	3.85	3.97	4.12
Barley, feed, Duluth (\$/bu.) 2/	1.44	1.78	2.31	2.20	2.28	2.01	2.11	2.18	2.07	2.09
Barley, malting, Minneapolis (\$/bu.)	1.89	2.04	4.11	3.20	3.20	2.32	2.30	2.40	2.31	2.33
Exports 3/										
Corn (mil. bu.)	1,504	1,723	2,028	2,367	239	106	108	168	142	144
Feed grains (mil. metric tons) 4/	46.3	62.3	81.3	89.9	7.0	3.2	3.5	5.0	4.3	4.2
Marketing year 1/										
				1989		1990				
1986/87		1987/88	1988/89	1989/90	Sept-Nov	Dec-Feb	Mar-May	June-Aug	Sept-Nov	Dec-Feb
Corn										
Stocks, beginning (mil. bu.)	4,040	4,882	4,250	1,930	1,930	7,082	4,812	2,843	1,345	6,940
Domestic use										
Feed (mil. bu.)	4,714	4,805	3,979	4,456	1,494	1,291	1,014	856	1,648	—
Food, seed, ind. (mil. bu.)	1,192	1,229	1,245	1,271	298	297	338	338	305	—
Exports (mil. bu.)	1,504	1,723	2,036	2,367	582	682	601	602	385	—
Total use (mil. bu.)	7,410	7,757	7,260	8,114	2,374	2,270	1,970	1,499	2,338	—

1/ September 1 for corn & sorghum; June 1 for oats & barley. 2/ Beginning March 1987 reporting point changed from Minneapolis to Duluth. 3/ Includes products. 4/ Aggregated data for corn, sorghum, oats, & barley. — = not available.

Information contact: James Cole (202) 219-0840.

Table 21.—Fats & Oils

	Marketing year *				1989		1990				
	1985/86	1986/87	1987/88	1988/89	Dec	Aug	Sept	Oct	Nov	Dec	
Soybeans											
Wholesale price, no. 1 yellow, Chicago (\$/bu.)	5.20	5.03	6.67	7.41	5.74	6.06	6.19	6.09	5.72	5.78	
Crushings (mil. bu.)	1,052.6	1,178.6	1,174.5	1,057.7	105.4	92.6	92.1	106.1	106.0	102.7	
Exports (mil. bu.)	740.7	756.9	801.6	530.8	86.1	28.3	27.9	29.8	82.8	66.8	
Stocks, beginning (mil. bu.)	316.0	536.4	436.4	302.6	108.6	46.9	45.2	34.5	130.1	130.7	
Soybean oil											
Wholesale price, crude, Decatur (cts/lb.)	18.02	15.36	22.67	21.00	19.11	25.0	24.5	22.8	21.1	21.6	
Production (mil. lb.)	11,617.3	12,783.1	12,974.5	11,737.0	1,611.2	1,059.2	1,038.1	1,188.1	1,188.0	1,138.0	
Domestic disp., (mil. lb.)	10,045.0	10,620.2	10,734.1	10,455.6	975.2	1,029.8	705.1	1,211.3	956.6	982.1	
Exports (mil. lb.)	1,257.3	1,184.5	1,873.2	1,658.2	173.4	82.5	298.9	85.4	107.2	12.1	
Stocks, beginning (mil. lb.)	632.6	946.6	1,725.0	2,092.2	1,532.4	1,433.2	1,380.2	1,324.6	1,216.9	1,320.1	
Soybean meal											
Wholesale price, 44% protein, Decatur (\$/ton)	154.88	162.61	221.90	233.46	179.40	172.40	176.90	172.50	163.00	164.80	
Production (1,000 ton)	24,951.3	27,758.6	28,060.2	24,942.7	2,619.6	2,237.1	2,187.3	2,508.6	2,613.2	2,431.6	
Domestic disp., (1,000 ton)	19,117.2	20,387.4	21,275.9	19,792.6	1,820.6	1,955.9	1,855.8	2,246.9	1,989.9	1,870.3	
Exports (1,000 ton)	6,009.3	7,343.0	6,671.0	5,130.8	565.1	316.9	245.3	289.2	500.7	418.7	
Stocks, beginning (1,000 ton)	388.9	211.7	240.2	163.5	295.6	267.7	232.0	318.3	290.9	313.6	
Margarine, wholesale price, Chicago, white (cts/lb.)	51.2	40.3	40.3	52.3	52.3	62.6	61.9	61.7	61.6	62.9	

* Beginning September 1 for soybeans; October 1 for soymeal & oil; calendar year for margarine.

Note: Census data on which this table is based are now being reported quarterly. Consequently, the next revision of this table will appear in May for the Jan-Mar quarter.

Information contact: Roger Hoekin (202) 219-0840. Tom Bickerton (202) 219-0824.

Table 22.—Farm Programs, Price Supports, Participation & Payment Rates

	Target price	Loan rate	Findley loan rate	Payment rates			Base acres 1/	Program 2/	Participa-tion rate 3/
				Deficiency		Paid land diversion			
				\$/bu.	Percent 4/	Mil. acres			
Wheat									
1984/85	4.38	3.30	—	1.00	2.70	85	94.0	20/10/10-20	60/60/20
1985/86	4.38	3.30	—	1.08	2.70	—	94.0	20/10/0	73
1986/87 5/	4.38	3.00	2.40	1.98	2.00	1.10	91.6	22.5/2.5/5-10	85/85/21
1987/88	4.38	2.85	2.28	1.81	—	—	87.6	27.5/0/0	88
1988/89	4.23	2.76	2.21	0.89	—	—	84.8	27.5/0/0	88
1989/90	4.10	2.58	2.06	7/ 0.32	—	—	82.3	10/0/0	78
1990/91	4.00	2.44	1.95	1.00	—	—	80.5	5/0/0	80
Rice									
1984/85	11.90	8.00	—	3.76	—	—	4.1	25/0/0	85
1985/86	11.90	8.00	8/ 3.16	3.90	3.50	—	4.2	20/15/0	90
1986/87 5/	11.90	7.20	8/ 3.82	4.70	—	—	4.2	35/0/0	94
1987/88	11.66	6.84	8/ 5.77	4.82	—	—	4.1	35/0/0	96
1988/89	11.15	6.63	8/ 6.30	4.31	—	—	4.1	25/0/0	94
1989/90	10.80	6.50	8/ 6.50	3.56	—	—	4.1	25/0/0	95
1990/91	10.71	6.50	—	3.71	—	—	4.2	20/0/0	92
Corn									
1984/85	3.03	2.55	—	0.43	—	—	80.8	10/0/0	54
1985/86	3.03	2.55	—	0.48	—	—	84.2	10/0/0	69
1986/87 5/	3.03	2.40	1.92	1.11	—	—	81.7	17.5/2.5/0	86
1987/88	3.03	2.28	1.82	1.09	2.00	—	81.5	20/15/0	90
1988/89	2.83	2.21	1.77	7/ 0.36	1.75	—	82.9	20/10/0; 0/92	87
1989/90	2.84	2.08	1.85	7/ 0.58	—	—	82.7	10/0/0; 0/92	80
1990/91	2.75	1.98	1.67	0.15	—	—	82.7	10/0/0; 0/92	78
Sorghum									
1984/85	2.88	2.42	—	0.46	—	—	18.4	8/ (same)	42
1985/86	2.88	2.42	—	0.46	—	—	19.3	—	55
1986/87 5/	2.88	2.28	1.82	1.08	0.65	—	19.0	—	75
1987/88	2.88	2.17	1.74	0.82	1.90	—	17.4	—	84
1988/89	2.78	2.10	1.85	0.48	1.65	—	16.8	—	82
1989/90	2.70	1.98	1.57	7/ 0.66	—	—	16.2	—	71
1990/91	2.61	1.88	1.49	0.21	—	—	15.4	—	75
Barley									
1984/85	2.60	2.08	—	0.28	—	—	11.8	8/ (same)	44
1985/86	2.60	2.08	—	0.52	—	—	13.3	—	57
1986/87 5/	2.60	1.95	1.56	0.99	0.67	—	12.4	—	72
1987/88	2.60	1.88	1.49	0.52	1.60	—	12.5	—	84
1988/89	2.51	1.80	1.44	1.04	1.40	—	12.5	—	78
1989/90	2.43	1.88	1.34	7/ 0.23	—	—	12.4	—	89
1990/91	2.36	1.60	1.28	0.28	—	—	11.9	—	66
Oats									
1984/85	1.60	1.31	—	0.00	—	—	9.8	8/ (same)	14
1985/86	1.60	1.31	—	0.29	—	—	9.4	—	14
1986/87 5/	1.60	1.23	0.99	0.39	0.38	—	9.2	—	37
1987/88	1.60	1.17	0.94	0.20	0.60	—	8.4	—	45
1988/89	1.55	1.13	0.90	0.30	—	—	7.9	5/0/0; 0/92	30
1989/90	1.60	1.08	0.85	0.00	—	—	7.6	5/0/0; 0/92	23
1990/91	1.45	1.01	0.81	0.00	—	—	7.6	5/0/0; 0/92	10
Soybeans 9/									
1984/85	—	5.02	—	—	—	—	—	—	—
1985/86	—	5.02	—	—	—	—	—	—	—
1986/87 5/	—	4.77	—	—	—	—	—	—	—
1987/88	—	4.77	—	—	—	—	—	—	—
1988/89	—	4.77	—	—	—	—	—	—	—
1989/90	—	4.53	—	—	—	—	—	10/ 10/25	—
1990/91	—	4.50	—	—	—	—	—	10/ 0/25	—
Upland cotton									
1984/85	81.0	55.00	—	18.80	—	—	15.6	25/0/0	70
1985/86	81.0	57.30	—	23.70	30.00	—	15.9	20/10/0	82/0/0
1986/87 5/	81.0	55.00	11/ 44.00	26.00	—	—	15.5	25/0/0	93
1987/88	79.4	62.25	12/ —	17.3	—	—	14.5	25/0/0	93
1988/89	75.9	51.80	12/ —	10.4	—	—	14.5	12.5/0/0	89
1989/90	73.4	50.00	12/ —	13.1	—	—	14.6	25/0/0	89
1990/91	72.0	50.27	12/ —	6.3	—	—	14.5	12.5/0/0	86

1/ Includes planted area plus acres considered planted (ARP, PLD, 0-92 etc). Net of CRP. 2/ Percentage of base acres enrolled in Acreage Reduction Programs/Paid Land Diversion/PIK were required to devote to conserving uses to receive program benefits. 3/ Percentage of base acres enrolled in Acreage Reduction Programs/Paid Land Diversion/PIK. 4/ Percent of program yield, except 1986/87 wheat, which is dollars per bushel. 1984 PIK rates apply only to the 10-20 portion. 5/ Rates for payments received in cash were reduced by 4.3 percent in 1986/87 due to Gramm-Rudman-Hollings. 6/ Annual average world market price. 7/ Guaranteed to farmers signed up for 0/92. 8/ The sorghum, oats, & barley programs were the same as for corn in each year except 1988-90, when the oats ARP was lower than for the other feed grains. 9/ There are no target prices, acreage programs, or payment rates for soybeans. 10/ Soybean program date refer to percent of program crop base permitted to shift into beans without loss of base. 11/ Loan repayment rate. 12/ Loans may be repaid at the lower of the loan rate or world market prices. *On September 13, the Secretary announced that participating farmers have the option of planting up to 105 percent of their wheat bases to boost 1990 supplies. For every acre planted in excess of 95 percent of base, the acreage used to compute deficiency payments will be cut by 1 acre. — = not available.

Information contact: James Cole (202) 219-0840.

Table 23.—Fruit

	1982	1983	1984	1985	1986	1987	1988	1989	1990 P
Citrus 1/									
Production (1,000 ton)	12,139	13,682	10,832	10,626	11,058	11,993	12,781	13,186	10,817
Per capita consumpt. (lbs.) 2/	24.7	29.4	24.0	22.8	26.0	25.7	27.1	24.4	—
Noncitrus 3/									
Production (1,000 tons)	14,658	14,168	14,301	14,191	13,874	16,011	16,303	16,763	14,629
Per capita consumpt. (lbs.) 2/	52.7	63.6	67.5	66.6	66.5	75.1	71.9	72.2	—
									1991
F.o.b. shipping point prices									
Apples (\$/carton) 4/	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan
Pears (\$/box) 5/	11.00	11.28	13.85	19.88	11.95	12.16	13.00	13.08	14.06
	14.00	16.88	—	—	—	—	12.58	13.00	14.00
Grower prices									
Oranges (\$/box) 6/	7.84	7.15	6.02	6.07	5.31	4.48	6.31	6.18	6.62
Grapefruit (\$/box) 6/	7.82	8.74	6.35	6.44	7.22	6.61	6.53	6.83	5.66
Stocks, ending									
Fresh apples (mil. lbs.)	589.8	283.9	118.9	8.8	3,005	4,690.0	4,003.7	3,378.3	2,004.8
Fresh pears (mil. lbs.)	26.9	2.3	33.8	199.8	578.0	449.6	322.6	206.2	191.1
Frozen fruits (mil. lbs.)	583.7	653.2	790.8	859.6	864.6	812.7	864.6	836.0	749.2
Frozen orange juice (mil. lbs.)	1,586.2	1,074.8	1,006.1	808.4	797.1	802.0	871.3	1,031.6	1,177.3

1/ 1990 indicated 1988/90 season. 2/ Fresh per capita consumption. 3/ Calendar year. 4/ Red delicious, Washington, extra fancy, carton tray pack, 125's. 5/ D'Anjou, Washington, standard box wrapped, U.S. no. 1, 135's. 6/ U.S. equivalent on-tree returns. P = preliminary. — = not available.

Information contact: Wynnice Napper (202) 219-0884.

Table 24.—Vegetables

	Calendar year									
	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990 P
Production										
Total vegetables (1,000 cwt)	392,343	430,795	403,509	456,334	453,030	448,629	478,381	468,770	542,437	557,088
Fresh (1,000 cwt) 1/ 3/	183,456	193,451	185,782	201,817	203,649	203,165	220,539	228,367	230,281	234,506
Processed (ton) 2/ 3/	10,444,330	11,867,170	10,886,350	12,725,880	12,474,040	12,273,200	12,892,100	12,019,110	15,167,700	16,129,080
Mushrooms (1,000 lbs.)	517,148	490,828	581,531	595,881	687,958	614,393	631,810	687,750	715,010	—
Potatoes (1,000 cwt)	340,623	355,131	333,726	362,039	406,809	361,743	389,320	356,438	370,444	393,857
Sweetpotatoes (1,000 cwt)	12,799	14,833	12,083	12,902	14,673	12,366	11,611	10,945	11,358	13,020
Dry edible beans (1,000 cwt)	32,751	26,663	16,620	21,070	22,175	22,986	26,031	19,253	23,729	32,429
										1991
Shipments										
Fresh (1,000 cwt) 4/	22,476	35,292	30,291	21,826	22,032	14,898	20,451	17,823	17,112	23,352
Potatoes (1,000 cwt)	12,800	18,062	10,136	8,256	10,029	8,059	11,947	11,405	10,434	14,681
Sweetpotatoes (1,000 cwt)	331	266	187	109	101	302	562	920	845	399

1/ Includes fresh production of asparagus, broccoli, carrots, cauliflower, celery, sweet corn, lettuce, honeydews, onions, & tomatoes. 2/ Includes processing production of snap beans, sweet corn, green peas, tomatoes, cucumbers (for pickles), asparagus, broccoli, carrots, & cauliflower. 3/ Asparagus & cucumber estimates were not available for 1982 & 1983. 4/ Includes snap beans, broccoli, cabbage, carrots, cauliflower, celery, sweet corn, cucumbers, eggplant, lettuce, onions, bell peppers, squash, tomatoes, & turnips. Honeydews, & watermelons. — = not available.

Information contact: Gary Lucier or Cathy Greene (202) 219-0884.

Table 25.—Other Commodities

	Annual					1989				1990			
	1986	1987	1988	1989	1990	Oct-Dec	Jan-Mar	Apr-June	July-Sept	Oct-Dec	Jan-Mar	Apr-June	July-Sept
Sugar													
Production 1/	6,257	7,309	7,087	6,840	6,319	3,709	1,871	572	652	3,424			
Deliveries 1/	7,786	8,167	8,188	8,309	8,631	2,190	1,068	2,048	2,308	2,307			
Stocks, ending 1/	3,225	3,195	3,132	2,946	2,642	2,933	3,112	2,165	1,210	2,842			
Coffee													
Composite green price													
N.Y. (cts./lb.)	185.18	109.14	116.50	95.17	76.93	63.70	73.22	78.56	79.10	76.85			
Imports, green bean equiv. (mil. lbs.) 2/	2,506	2,638	2,072	2,630	2,714	725	866	702	630	816			
Tobacco													
Prices at auctions 3/													
Flue-cured (\$/lb.)	1.59	1.61	—	—	1.67	—	—	—	—	—	—	—	—
Burley (\$/lb.)	1.56	1.61	—	—	—	—	—	—	—	—	—	—	—
Domestic consumption 4/													
Cigarettes (bill.)	575.0	602.5	540.1	26.8	41.1	48.5	45.3	47.2	45.8	39.8			
Large cigarets (mil.)	2,728	2,531	2,467.0	158.5	164.3	198.5	174.2	205.0	221.6	184.4			

1/ 1,000 short tons, raw value. Quarterly data shown at end of each quarter. 2/ Net imports of green & processed coffee. 3/ Crop year July-June for flue-cured, Oct.-Sept. for burley. 4/ Taxable removals. — = not available.

Information contacts: sugar, Peter Buzzanell (202) 219-0886, coffee, Fred Grey (202) 219-0888, tobacco, Verner Griss (202) 219-0890.

World Agriculture

Table 26.—World Supply & Utilization of Major Crops, Livestock, & Products.

	1984/85	1985/86	1986/87	1987/88	1988/89	1989/90 P	1990/91 F
Million units							
Wheat							
Area (hectares)	231.2	229.6	228.2	220.0	218.0	225.5	230.8
Production (metric tons)	511.9	500.1	530.7	502.3	500.4	536.8	580.0
Exports (metric tons) 1/	107.0	85.0	90.7	105.0	96.9	98.6	93.4
Consumption (metric tons) 2/	493.0	496.2	522.6	530.2	531.9	534.5	562.0
Ending stocks (metric tons) 3/	164.4	168.2	178.4	148.5	117.0	119.3	145.4
Coarse grains							
Area (hectares)	334.6	341.3	336.5	324.3	325.9	321.9	321.8
Production (metric tons)	815.8	843.1	831.9	793.9	731.2	803.5	825.7
Exports (metric tons) 1/	100.4	83.2	83.3	83.2	94.5	100.1	85.5
Consumption (metric tons) 2/	782.6	778.8	800.0	814.9	796.4	826.8	827.7
Ending stocks (metric tons) 3/	143.9	208.2	234.0	213.0	147.8	124.5	122.5
Rice, milled							
Area (hectares)	144.2	144.9	145.3	141.8	145.5	146.7	147.0
Production (metric tons)	318.9	318.9	318.7	314.2	330.9	344.8	349.7
Exports (metric tons) 4/	11.3	12.0	12.0	11.9	15.1	12.3	12.3
Consumption (metric tons) 2/	310.2	319.4	322.7	320.0	328.6	338.1	348.7
Ending stocks (metric tons) 3/	58.0	66.4	61.4	45.0	47.0	54.0	57.0
Total grains							
Area (hectares)	710.0	715.8	710.0	685.9	689.4	694.1	699.8
Production (metric tons)	1,646.6	1,662.1	1,661.3	1,610.4	1,562.5	1,685.1	1,764.4
Exports (metric tons) 1/	218.7	180.8	186.9	200.1	206.5	209.0	191.2
Consumption (metric tons) 2/	1,585.8	1,594.4	1,651.2	1,665.1	1,658.9	1,699.4	1,737.3
Ending stocks (metric tons) 3/	364.3	431.6	461.8	407.1	312.7	298.4	325.5
Oilseeds							
Crush (metric tons)	150.7	155.1	161.4	167.7	166.1	173.2	177.5
Production (metric tons)	191.1	196.2	194.4	209.5	203.7	213.9	217.3
Exports (metric tons)	33.1	34.5	37.7	39.5	32.0	35.7	33.8
Ending stocks (metric tons)	21.1	26.8	23.3	24.0	22.3	23.2	23.0
Meals							
Production (metric tons)	101.8	105.0	110.5	115.1	112.1	117.7	119.8
Exports (metric tons)	32.3	34.4	36.7	36.2	38.2	38.3	39.0
Oils							
Production (metric tons)	48.2	49.4	50.3	53.2	53.8	57.4	58.7
Exports (metric tons)	15.6	16.4	16.9	17.7	18.3	19.7	19.1
Cotton							
Area (hectares)	34.0	31.7	29.8	31.1	33.8	32.0	33.6
Production (bales)	89.0	80.8	70.9	81.2	84.7	79.9	87.6
Exports (bales)	20.3	20.3	28.0	23.3	26.1	24.0	24.3
Consumption (bales)	70.2	77.3	82.8	84.5	85.6	87.3	88.4
Ending stocks (bales)	43.4	47.4	35.0	31.8	30.2	23.7	24.0
	1985	1986	1987	1988	1989	1990 P	1991 F
Red meat							
Production (metric tons)	103.6	106.5	109.8	113.4	115.2	114.4	116.1
Consumption (metric tons)	101.5	105.4	107.9	111.7	113.8	113.8	115.0
Exports (metric tons) 1/	6.3	8.7	8.6	8.9	7.2	8.5	8.8
Poultry 5/							
Production (metric tons)	28.2	29.3	31.3	32.0	34.1	35.7	37.2
Consumption (metric tons)	25.8	28.9	30.8	32.5	33.8	35.2	36.8
Exports (metric tons) 1/	1.2	1.2	1.5	1.7	1.8	2.0	2.1
Dairy							
Milk production (metric tons)	413.4	425.8	425.9	429.1	434.8	441.0	443.4

1/ Excludes intra-EC trade. 2/ Where stocks data not available (excluding USSR), consumption includes stock changes. 3/ Stocks data are based on differing marketing years & do not represent levels at a given date. Data not available for all countries; includes estimated change in USSR grain stocks but not absolute level. 4/ Calendar year data. 1985 data correspond with 1984/85, etc. 5/ Poultry excludes the Peoples Republic of China before 1980. P = preliminary. F = forecast.

Information contacts: Crops, Carol Whitton (202) 219-0313; red meat & poultry, Linda Bailey (202) 219-1285; dairy, Sara Short (202) 219-0770.

U.S. Agricultural Trade

Table 27.—Prices of Principal U.S. Agricultural Trade Products

	Annual			1990						1991
	1988	1989	1990	Jan	Aug	Sept	Oct	Nov	Dec	Jan
Export commodities										
Wheat, f.o.b. vessel, Gulf ports (\$/bu.)	3.97	4.05	3.72	4.59	3.21	3.14	3.16	3.09	3.10	3.05
Corn, f.o.b. vessel, Gulf ports (\$/bu.)	2.73	2.85	2.79	2.70	2.80	2.60	2.55	2.58	2.63	2.71
Grain sorghum, f.o.b. vessel, Gulf ports (\$/bu.)	2.52	2.70	2.85	2.60	2.67	2.52	2.50	2.51	2.60	2.68
Soybeans, f.o.b. vessel, Gulf ports (\$/bu.)	7.81	7.06	8.24	8.07	8.42	8.45	8.33	8.09	8.13	8.03
Soybean oil, Decatur (cts./lb.)	23.52	20.21	22.75	19.55	24.78	23.89	22.09	20.75	21.29	21.42
Soybean meal, Decatur (\$/ton)	234.75	216.50	189.37	171.86	171.09	175.79	172.49	163.81	164.79	158.98
Cotton, 8-market avg. spot (cts./lb.)	57.25	63.78	71.25	62.21	76.27	71.01	70.54	69.48	69.92	70.51
Tobacco, avg. price at auction (cts./lb.)	153.81	151.50	164.81	160.77	159.51	170.20	168.82	169.88	170.09	171.81
Rice, f.o.b. mill, Houston (\$/cwt.)	19.80	16.68	15.52	15.80	15.81	14.50	14.50	14.50	14.50	14.50
Inedible tallow, Chicago (cts./lb.)	16.64	14.71	13.54	14.87	10.12	12.00	13.25	14.09	14.25	14.43
Import commodities										
Coffee, N.Y. spot (\$/lb.)	1.21	1.04	0.81	0.72	0.81	0.87	0.85	0.80	0.82	0.82
Rubber, N.Y. spot (cts./lb.)	89.20	80.95	46.28	44.72	47.48	48.43	46.60	46.26	47.03	47.47
Cocoa beans, N.Y. (\$/lb.)	0.89	0.55	0.55	0.44	0.56	0.50	0.57	0.58	0.60	0.65

Information contact: Mary Teymourian (202) 219-0824.

Table 28.—Indexes of Real Trade-Weighted Dollar Exchange Rates¹

	1990										1991	
	Apr	May	June P	July P	Aug P	Sept P	Oct P	Nov P	Dec P	Jan P	Feb P	
											1985 = 100	
Total U.S. trade 2/	67.9	66.8	67.3	66.5	63.4	63.1	61.2	60.5	61.6	62.0	61.5	
Agricultural trade												
U.S. markets	79.4	78.8	79.0	79.3	79.2	78.8	76.7	76.2	77.2	77.4	77.3	
U.S. competitors	79.2	77.8	77.5	78.5	78.2	78.4	78.1	78.0	78.5	78.0	78.0	
Wheat												
U.S. markets	89.9	89.8	90.4	93.8	96.5	96.3	94.8	94.5	95.8	96.1	97.1	
U.S. competitors	78.4	78.4	78.8	73.5	72.5	72.8	72.8	73.2	73.9	74.1	74.2	
Soybeans												
U.S. markets	70.4	69.4	69.9	68.4	67.0	66.1	64.1	63.5	64.5	64.8	64.2	
U.S. competitors	75.8	69.2	68.0	63.9	64.3	64.7	64.9	65.1	65.3	65.5	65.8	
Corn												
U.S. markets	74.8	73.3	74.0	74.7	73.8	72.3	70.0	69.8	70.8	71.0	70.4	
U.S. competitors	81.8	75.8	74.5	71.1	70.2	70.4	69.7	69.4	70.4	71.2	71.2	
Cotton												
U.S. markets	78.0	76.8	77.6	76.5	76.0	74.9	73.2	73.1	74.4	74.8	74.3	
U.S. competitors	83.8	83.0	81.5	88.3	90.0	89.3	88.2	86.3	85.4	84.1	84.1	

1/ Real Indexes adjust nominal exchange rates for differences in rates of inflation, to avoid the distortion caused by high-inflation countries. A higher value means the dollar has appreciated. See the October 1988 issue of Agricultural Outlook for a discussion of the calculations and the weights used. 2/ Federal Reserve Board Index of trade-weighted value of the U.S. dollar against 10 major currencies. Weights are based on relative importance in world financial markets P = preliminary.

Information contact: Tim Baxter, David Stallings (202) 219-0718.

Table 29.—Trade Balance

	Fiscal year 1/									Dec 1990	
	1984	1985	1986	1987	1988	1989	1990	1991 F			
Exports											
Agricultural	38,027	31,201	26,312	27,878	35,318	39,637	40,182	37,000	31,164		
Nonagricultural	170,014	179,236	179,291	202,911	258,658	301,222	325,928	—	28,449		
Total 2/	208,041	210,437	205,603	230,787	293,972	340,856	366,110	—	31,813		
Imports											
Agricultural	18,918	19,740	20,884	20,650	21,014	21,477	22,514	22,500	1,810		
Nonagricultural	297,738	313,722	342,846	367,374	409,138	441,074	458,147	—	37,271		
Total 3/	316,652	333,462	363,730	388,024	430,152	462,551	480,661	—	39,081		
Trade balance											
Agricultural	19,111	11,461	5,428	7,226	14,302	18,180	17,668	14,500	1,354		
Nonagricultural	-127,722	-134,488	-163,555	-184,463	-150,482	-139,852	-132,219	—	-8,822		
Total	-108,611	-123,025	-158,127	-157,237	-136,180	-121,692	-114,551	—	-7,468		

1/ Fiscal years begin October 1 & end September 30. Fiscal year 1990 began Oct. 1, 1989 & ended Sept. 30, 1990. 2/ Domestic exports including Department of Defense shipments (F.A.S. value). 3/ Imports for consumption (customs value). F = forecast. — = not available.

Information contact: Stephen MacDonald (202) 219-0822.

Table 30.—U.S. Agricultural Exports & Imports

	Fiscal year*			Dec 1990	Fiscal year*			Dec 1990	
	1989	1990	1991 F		1989	1990	1991 F		
	1,000 units				\$ million				
EXPORTS									
Animals, live (no.) 1/	758	685	—	69	475	381	—	56	
Meats & preps., excl. poultry (mt)	869	676	2/ 700	70	2,355	2,457	—	213	
Dairy products (mt) 1/	192	92	—	2	475	348	400	17	
Poultry meats (mt)	428	567	600	45	510	631	—	53	
Fats, oils, & greases (mt)	1,377	1,264	1,100	105	531	459	—	38	
Hides & skins incl. furskins	—	—	—	—	1,713	1,796	—	121	
Cattle hides, whole (no.) 1/	26,260	24,777	—	1,835	1,360	1,365	—	100	
Mink pelts (no.) 1/	3,073	5,128	—	92	91	116	—	3	
Grains & feeds (mt)	114,892	112,967	—	7,150	16,829	15,094	3/12,000	920	
Wheat (mt)	37,641	27,099	26,500	1,535	6,004	4,209	4/3,000	179	
Wheat flour (mt)	1,176	882	1,000	98	255	203	—	15	
Rice (mt)	3,041	2,501	2,400	293	955	829	700	77	
Feed grains, incl. products (mt)	60,958	60,510	54,800	4,344	7,374	8,093	6,000	450	
Feeds & fodders (mt)	11,086	11,125	6/11,500	838	1,849	1,826	—	145	
Other grain products (mt)	790	970	—	51	514	665	—	45	
Fruits, nuts, & preps. (mt)	2,655	2,873	—	249	2,304	2,780	—	243	
Fruit juices incl.	—	—	—	—	—	—	—	—	
froz. (1,000 hectoliters) 1/	4,997	5,975	—	528	264	328	—	29	
Vegetables & preps. (mt)	1,865	2,243	—	239	1,542	2,079	—	210	
Tobacco, unmanufactured (mt)	212	220	200	31	1,274	1,373	1/400	193	
Cotton, excl. linters (mt)	1,441	1,086	1,800	187	2,040	2,704	3,000	283	
Seeds (mt)	511	578	—	48	507	576	600	70	
Sugar, cane or beet (mt)	368	447	—	44	134	187	—	17	
Oilseeds & products (mt)	21,052	23,772	—	2,009	6,829	8,098	5,600	497	
Oilseeds (mt)	14,592	17,703	—	1,542	4,363	4,240	—	370	
Soybeans (mt)	14,093	17,217	15,400	1,502	4,085	3,939	3,500	343	
Protein meal (mt)	4,963	4,767	—	401	1,358	1,022	—	81	
Vegetable oils (mt)	1,498	1,302	—	65	908	830	—	46	
Essential oils (mt)	13	14	—	1	171	182	—	16	
Other	106	89	—	8	1,802	2,120	—	185	
Total	145,481	147,686	131,000	10,168	39,637	40,182	37,000	3,164	
IMPORTS									
Animals, live (no.) 1/	2,485	2,940	—	318	740	1,053	1,100	116	
Meats & preps., excl. poultry (mt)	1,091	1,142	—	96	2,432	2,848	—	239	
Beef & veal (mt)	668	754	750	87	1,525	1,842	1,800	181	
Pork (mt)	371	340	370	25	778	888	1,000	68	
Dairy products (mt) 1/	211	254	—	18	834	951	900	68	
Poultry & products 1/	—	—	—	—	130	129	—	7	
Fats, oils, & greases (mt)	14	19	—	2	14	15	—	2	
Hides & skins, incl. furskins 1/	—	—	—	—	241	135	—	12	
Wool, unmanufactured (mt)	62	47	—	3	319	187	—	10	
Grains & feeds (mt)	3,467	3,471	3,500	342	1,139	1,181	1,200	102	
Fruits, nuts, & preps., excl. juices (mt)	5,036	5,331	5,300	421	2,269	2,486	—	208	
Bananas & plantains (mt)	3,039	3,236	3,200	268	851	926	1,000	77	
Fruit juices (1,000 hectoliters) 1/	27,747	33,922	30,000	2,703	792	1,001	—	66	
Vegetables & preps. (mt)	2,217	2,242	—	182	1,059	2,264	2,100	187	
Tobacco, unmanufactured (mt)	169	193	180	10	521	588	600	32	
Cotton, unmanufactured (mt)	13	30	—	1	8	20	—	1	
Seeds (mt)	158	171	170	8	187	164	200	13	
Nursey stock & cut flowers 1/	—	—	—	—	466	519	—	43	
Sugar, cane or beet (mt)	1,857	1,789	—	91	620	734	—	38	
Oilseeds & products (mt)	1,917	2,034	—	158	948	964	1,000	75	
Oilseeds (mt)	424	534	—	34	159	206	—	11	
Protein meal (mt)	359	310	—	23	65	48	—	3	
Vegetable oils (mt)	1,133	1,189	—	101	721	710	—	61	
Beverages excl. fruit juices (1,000 hectoliters) 1/	13,967	13,543	—	997	1,815	1,867	—	147	
Coffee, tea, cocoa, spices	1,867	2,202	3,200	165	3,895	3,485	—	275	
Coffee, incl. products (mt)	1,084	1,290	1,200	99	2,467	1,997	2,000	162	
Cocoa beans & products (mt)	564	698	650	49	969	1,042	1,000	80	
Rubber & allied gums (mt)	927	840	850	76	1,051	712	700	64	
Other	—	—	—	—	1,097	1,229	—	108	
Total	—	—	—	—	21,477	22,514	22,500	1,810	

*Fiscal years begin Oct. 1 & end Sept. 30. Fiscal year 1990 began Oct. 1, 1989 & ended Sept. 30, 1990. 1/ Not included in total volume and also other dairy products for 1988 & 1990. 2/ Forecasts for footnoted items 2/–6/ are based on slightly different groups of commodities. Fiscal 1990 exports of categories used in the 1991 forecasts were 2/ 676,000 m. tons. 3/ 16,014 million. 4/ 4,426 million i.e. includes flour. 5/ 11,065 million m. tons. F = forecast. — = not available.

Table 31.—U.S. Agricultural Exports by Region

Region & country	Fiscal year*			Dec 1990	Change from year* earlier			Dec 1990
	1989	1990	1991 F		1989	1990	1991 F	
	\$ million				Percent			
WESTERN EUROPE	7,074	7,331	7,300	805	-12	4	0	8
European Community (EC-12)	6,565	6,838	6,800	767	-12	4	0	7
Belgium-Luxembourg	431	431	—	49	1	0	—	8
France	474	469	—	68	-16	-1	—	38
Germany, Fed. Rep.	918	1,096	—	154	-28	19	—	61
Italy	609	704	—	92	-15	16	—	11
Netherlands	1,847	1,837	—	158	-12	-11	—	-15
United Kingdom	736	761	—	83	-10	3	—	12
Portugal	307	338	—	26	-10	10	—	-21
Spain, Incl. Canary Islands	876	901	—	91	3	13	—	-16
Other Western Europe	510	493	500	48	-2	-3	0	27
Switzerland	166	171	—	17	-14	3	—	33
EASTERN EUROPE	422	533	500	28	-24	26	—	43
German Dem. Rep.	72	58	—	0	8	-20	—	-100
Poland	45	101	—	2	-73	127	—	-60
Yugoslavia	76	129	—	14	-26	69	—	382
Romania	62	210	—	0	-33	239	—	-99
USSR	3,299	3,989	1,600	56	70	-9	-47	-86
ASIA	18,677	18,131	16,600	1,376	17	-3	-8	-15
West Asia (Middle East)	2,273	1,995	1,800	124	19	-12	0	-43
Turkey	238	259	—	17	97	9	—	-31
Iraq	791	497	0	0	8	-37	-100	-100
Israel, Incl. Gaza & W. Bank	331	285	—	19	-1	-14	—	27
Saudi Arabia	482	502	600	65	4	4	20	22
South Asia	1,161	729	—	12	44	-37	—	-80
Bangladesh	213	125	—	4	98	-41	—	1,187
India	243	115	—	7	-31	-53	—	23
Pakistan	599	391	200	2	117	-35	-50	-98
China	1,496	909	700	39	144	-39	-22	-57
Japan	8,148	8,106	7,900	707	12	-1	-8	5
Southeast Asia	976	1,184	—	404	-4	21	—	51
Indonesia	216	277	—	26	-9	28	—	54
Philippines	344	351	400	33	0	2	0	198
Other East Asia	4,623	5,207	4,800	390	7	13	-12	-24
Taiwan	1,594	1,818	1,800	138	1	14	-11	-41
Korea, Rep.	2,453	2,703	2,300	187	9	10	-15	-17
Hong Kong	575	685	700	64	18	19	0	25
AFRICA	2,280	2,009	1,700	112	0	-12	-15	-36
North Africa	1,796	1,524	1,300	81	8	-15	-13	-43
Morocco	216	186	—	15	12	-23	—	-46
Algeria	549	488	500	24	2	-11	0	-40
Egypt	855	761	700	40	21	-20	-13	-22
Sub-Saharan	483	484	400	31	-21	0	0	-10
Nigeria	30	32	—	3	-31	7	—	13
Rep. S. Africa	57	81	—	2	-34	43	—	-49
LATIN AMERICA & CARIBBEAN	5,437	5,156	5,000	454	24	-5	-2	10
Brazil	149	105	200	57	-15	-30	100	392
Caribbean Islands	1,007	1,006	—	83	16	0	—	-9
Central America	448	464	—	48	8	4	—	75
Colombia	139	147	—	8	-22	6	—	-28
Mexico	2,755	2,668	2,500	190	60	-3	-7	-4
Peru	81	187	—	18	-54	132	—	-38
Venezuela	587	345	400	26	-2	-41	33	-12
CANADA	2,179	3,716	4,000	301	10	71	—	74
OCEANIA	268	317	300	30	13	18	0	-10
Total	39,637	40,182	38,500	3,164	12	1	-4	-11
Developed countries	17,997	19,780	20,100	1,859	1	10	—	14
Less developed countries	16,423	15,970	15,300	1,182	14	-3	-11	-18
Centrally planned countries	5,217	4,431	3,100	123	58	-15	-34	-75

*Fiscal years begin Oct. 1 & end Sept. 30. Fiscal year 1990 began Oct. 1, 1989 & ended Sept. 30, 1990. F = forecast. — = not available.. Note: Adjusted for transhipments through Canada.

Information contact: Stephen MacDonald (202) 219-0822.

Farm Income

Table 32.—Farm Income Statistics

	Calendar year										
	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990 F	1991 F
\$ billion											
1. Farm receipts											
Crops (incl. net CCC loans)	144.1	147.2	141.3	147.1	149.4	140.2	147.5	155.9	166.5	174	171 to 176
Livestock	72.5	72.3	67.2	69.9	74.3	63.7	65.0	71.4	75.4	78	77 to 81
Farm related 1/	69.2	70.3	66.6	72.9	69.8	71.6	76.0	78.8	83.7	89	85 to 89
2. Direct Government payments	1.0	3.5	9.3	8.4	7.7	11.8	16.7	14.6	10.9	9	8 to 10
Cash payments	1.0	3.5	4.1	4.0	7.6	8.1	8.8	7.1	9.1	8	8 to 9
Value of PIK commodities	0.0	0.0	6.2	4.6	0.1	3.7	10.1	7.4	1.7	1	0 to 1
3. Total gross farm income (4+5+6) 2/	166.3	163.6	153.2	170.2	162.9	156.5	169.0	173.8	189.2	194	190 to 195
4. Gross cash income (1+2)	146.0	150.6	150.8	155.5	157.2	152.0	164.3	170.4	177.5	183	180 to 185
5. Nonmoney income 3/	13.8	14.3	13.5	8.7	8.0	8.9	7.5	7.6	7.3	8	7 to 9
6. Value of inventory change	0.5	-1.4	-10.9	6.0	-2.3	-2.4	-2.8	-4.1	4.4	4	1 to 4
7. Cash expenses 4/	113.2	112.8	111.0	119.0	109.3	105.2	108.2	112.3	122.8	125	124 to 130
8. Total expenses	139.4	140.0	137.9	143.6	131.0	125.6	127.7	132.1	142.8	145	146 to 151
9. Net cash income (4-7)	32.8	37.9	39.5	36.8	47.9	46.7	56.1	56.1	54.8	58	53 to 58
10. Net farm income (3-8)	28.9	23.5	15.3	26.3	31.0	31.0	41.3	41.8	48.7	49	42 to 47
Deflated (1982\$)	28.6	23.5	14.7	24.5	27.9	27.3	35.2	34.4	36.9	37	31 to 34
11. Off-farm income	35.8	36.4	37.0	39.2	56.2	54.6	56.9	57.7	57.5	—	—
12. Loan changes 5/: Real estate	9.0	3.8	2.3	-2.0	-6.4	-8.7	-7.7	-4.1	-2.1	—	—
13. 5/: Non-real estate	5.5	3.4	0.9	-0.8	-9.6	-11.0	-4.6	-0.3	0.1	—	—
14. Rental income plus monetary change	8.4	8.4	6.4	9.2	9.1	8.0	8.8	7.6	8.2	—	—
15. Capital expenditures 6/	18.8	13.3	12.7	12.5	9.2	8.5	11.1	11.1	13.0	—	—
16. Net cash flow (9+12+13+14-15)	37.8	38.2	35.3	30.4	31.9	28.6	39.5	60.2	48.0	—	—

1/ Income from machine hire, custom work, sales of forest products, & other miscellaneous cash sources. 2/ Numbers in parentheses indicate the combination of items required to calculate a given item. 3/ Value of home consumption of self-produced food & imputed gross rental value of farm dwellings. 4/ Excludes capital consumption, perquisites to hired labor, & farm household expenses. 5/ Excludes farm households. Total may not add because of rounding. F = forecast. — = not available.

Information contact: Diane Bertelsen (202) 219-0809.

Table 33.—Balance Sheet of the U.S. Farming Sector

	Calendar year 1/										
	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990 F	1991 F
\$ billion											
Assets											
Real estate	784.7	748.8	758.2	610.3	540.8	507.3	525.4	555.4	577.8	585	600 to 610
Non-real estate	197.7	196.4	191.9	196.9	187.5	182.8	193.7	208.1	216.3	223	220 to 230
Livestock & poultry	53.5	53.0	49.5	49.5	46.3	47.8	56.0	65.5	69.7	74	74 to 78
Machinery & motor vehicles	87.0	87.5	87.4	88.0	83.8	81.9	79.4	80.6	83.5	86	85 to 89
Crops stored 2/	29.0	26.1	24.0	26.2	22.9	16.7	18.0	23.0	23.5	23	21 to 25
Purchased inputs	—	—	—	2.6	1.3	2.0	3.3	3.4	2.8	3	2 to 4
Financial assets	28.2	29.7	30.9	32.6	33.3	34.5	35.1	35.4	36.6	38	36 to 40
Total farm assets	982.4	945.2	950.1	807.2	728.3	690.1	719.1	763.5	793.9	818	825 to 835
Liabilities											
Real estate debt 3/	98.7	102.8	104.8	102.8	96.4	87.7	79.9	76.8	73.8	72	70 to 74
Non-real estate debt 4/	83.5	87.0	87.0	87.1	77.5	66.6	62.0	61.7	61.8	62	60 to 64
Total farm debt	182.3	189.5	192.7	189.9	173.9	154.2	142.0	137.6	135.6	134	131 to 137
Total farm equity	800.1	755.7	787.4	617.4	554.3	535.9	577.2	626.9	658.3	684	695 to 705
Percent											
Selected ratios											
Debt-to-assets	18.6	20.0	20.3	23.5	23.9	22.4	19.7	18.0	17.1	16	16 to 17
Debt-to-equity	22.8	25.1	25.4	30.8	31.4	28.8	24.6	22.0	20.6	20	19 to 20
Debt-to-net cash income	556	500	488	519	363	330	253	237	248	228	230 to 240

1/ As of Dec. 31. 2/ Non-CCC crops held on farms plus value above loan rates for crops held under CCC. 3/ Excludes debt on operator dwellings, but includes CCC storage and drying facilities loans. 4/ Excludes debt for nonfarm purposes. F = forecast.

Information contacts: Ken Erickson or Jim Ryan (202) 219-0798.

Table 34.—Cash Receipts From Farm Marketings, by State

Region & State	Livestock & products				Crops 1/				Total 1/			
	1989	1990	Nov 1990	Dec 1990	1989	1990	Nov 1990	Dec 1990	1989	1990	Nov 1990	Dec 1990
\$ million 2/												
NORTH ATLANTIC												
Maine	215	214	17	27	233	226	26	19	447	439	43	45
New Hampshire	63	63	5	5	79	78	5	6	142	141	11	11
Vermont	375	391	29	28	81	52	4	3	426	443	33	31
Massachusetts	112	112	9	9	317	297	42	27	429	409	51	36
Rhode Island	13	13	1	1	66	66	4	9	79	79	5	11
Connecticut	186	190	17	18	218	237	16	15	404	426	33	31
New York	1,946	2,005	153	152	911	941	80	85	2,857	2,945	233	237
New Jersey	197	200	17	17	463	478	42	30	880	878	58	47
Pennsylvania	2,595	2,707	205	249	986	1,070	107	103	3,581	3,783	312	352
NORTH CENTRAL												
Ohio	1,608	1,572	180	154	2,114	2,251	300	217	3,812	4,123	460	371
Indiana	1,817	2,048	191	158	2,502	2,848	193	312	4,318	4,896	384	470
Illinois	2,262	2,568	212	200	4,468	5,324	518	377	6,710	7,892	730	846
Michigan	1,313	1,432	112	113	1,627	1,713	243	193	2,940	3,145	355	307
Wisconsin	4,337	4,578	327	336	941	1,047	141	96	5,278	5,622	469	434
Minnesota	3,718	4,082	356	358	2,809	3,174	333	401	8,528	7,256	600	759
Iowa	5,209	6,048	587	664	3,911	4,499	496	322	9,119	10,515	1,083	966
Missouri	2,168	2,401	270	185	1,732	1,635	187	122	3,900	4,037	456	307
North Dakota	642	685	99	49	1,465	1,775	248	179	2,108	2,459	347	228
South Dakota	2,108	2,352	271	328	684	1,046	101	104	2,892	3,390	372	432
Nebraska	5,843	6,042	567	576	2,878	2,823	452	277	8,521	8,884	1,019	853
Kansas	4,245	4,508	342	402	2,079	2,182	234	219	6,324	6,690	576	621
SOUTHERN												
Delaware	503	482	31	36	160	183	21	10	663	645	52	45
Maryland	870	857	57	58	476	503	66	33	1,346	1,360	123	91
Virginia	1,372	1,434	144	88	685	718	82	53	2,058	2,152	227	141
West Virginia	250	249	24	18	64	65	7	6	314	314	31	24
North Carolina	2,505	2,560	233	224	2,046	2,164	184	111	4,551	4,714	417	335
South Carolina	551	587	53	45	675	584	51	39	1,225	1,150	103	84
Georgia	2,270	2,200	154	159	1,598	1,568	130	99	3,889	3,768	284	258
Florida	1,221	1,289	113	98	4,982	4,240	228	305	6,203	5,529	339	464
Kentucky	1,670	1,774	280	110	1,258	1,414	366	276	2,926	3,188	646	387
Tennessee	1,060	1,164	97	110	861	908	195	118	1,921	2,072	292	228
Alabama	1,932	1,940	132	128	896	967	79	57	2,628	2,607	211	185
Mississippi	1,292	1,288	89	91	1,000	1,099	238	167	2,292	2,387	327	257
Arkansas	2,661	2,537	191	170	1,470	1,543	370	156	4,131	4,080	581	328
Louisiana	614	636	52	43	1,048	1,286	244	240	1,861	1,902	296	283
Oklahoma	2,409	2,604	222	171	1,185	1,135	96	54	3,594	3,739	318	225
Texas	8,863	7,494	872	548	3,897	4,016	478	440	10,760	11,510	1,150	986
WESTERN												
Montana	899	915	182	78	710	749	87	70	1,810	1,884	269	148
Idaho	1,048	1,107	95	99	1,670	1,703	231	164	2,715	2,810	326	263
Wyoming	669	719	121	71	188	159	45	27	856	879	187	68
Colorado	2,849	2,803	287	248	1,250	1,176	183	119	3,890	3,970	430	365
New Mexico	974	1,050	180	72	450	450	55	40	1,424	1,500	235	112
Arizona	744	782	54	78	1,158	1,004	107	146	1,902	1,785	181	222
Utah	574	603	61	52	174	168	13	17	748	771	74	68
Nevada	141	141	9	10	94	100	11	11	235	241	20	21
Washington	1,201	1,306	97	101	2,438	2,447	254	227	3,639	3,752	350	327
Oregon	739	779	88	80	1,558	1,532	178	112	2,297	2,311	164	172
California	5,093	5,301	395	544	12,422	11,729	1,315	684	17,515	17,030	1,710	1,428
Alaska	9	9	1	1	20	20	2	2	29	29	3	3
Hawaii	92	92	8	8	495	491	41	41	587	583	49	49
UNITED STATES	83,724	89,161	8,051	7,608	75,449	77,535	9,106	7,233	159,173	166,696	17,157	14,841

1/ Sales of farm products include receipts from commodities placed under CCC loans minus value of redemptions during the period. 2/ Estimates as of end of current month. Totals may not add because of rounding.

Information contact: Roger Strickland (202) 219-0808.

Table 35.—Cash Receipts From Farming

	Annual						1989		1990				
	1985	1986	1987	1988	1989	1990	Dec	Aug	Sept	Oct	Nov	Dec	
\$ million													
Farm marketing & CCC loans*	144,114	135,197	141,853	150,192	159,173	166,096	14,276	13,214	14,541	19,055	17,157	14,841	
Livestock & products	60,822	71,639	78,010	78,821	83,724	89,161	7,063	7,457	7,882	8,250	8,051	7,608	
Meat animals	38,550	39,081	44,478	45,884	48,501	51,693	3,786	4,278	4,543	5,279	5,021	4,808	
Dairy products	18,055	17,724	17,727	17,641	19,401	20,156	1,924	1,756	1,661	1,583	1,494	1,519	
Poultry & eggs	11,209	12,701	11,517	12,867	15,346	14,960	1,201	1,257	1,268	1,231	1,226	1,240	
Other	2,008	2,034	2,288	2,429	2,386	2,352	153	187	211	157	311	151	
Crops	74,293	63,658	65,843	71,372	76,449	77,535	7,213	6,757	6,850	10,805	9,106	7,233	
Food grains	8,990	5,741	5,780	7,484	8,073	7,066	841	897	724	723	690	482	
Feed crops	22,591	16,912	14,543	14,305	16,656	18,991	1,732	1,297	1,098	2,760	2,254	1,796	
Cotton (lint & seed)	3,687	3,371	4,189	4,546	4,740	8,067	901	220	318	699	1,016	993	
Tobacco	2,609	1,921	1,826	1,960	2,381	2,701	227	438	486	420	436	318	
Oil-bearing crops	12,475	10,614	11,294	13,537	12,172	12,432	1,048	542	1,067	3,088	1,637	1,074	
Vegetables & melons	8,572	8,849	9,869	9,764	11,340	11,176	480	1,029	1,263	1,176	552	493	
Fruits & tree nuts	6,946	7,248	8,058	9,139	9,020	7,978	945	696	942	951	941	828	
Other	8,333	9,002	10,064	10,065	11,068	11,223	1,241	636	906	979	1,570	1,250	
Government payments	7,704	11,813	16,747	14,480	10,887	9,067	649	98	119	24	1,625	1,817	
Total	151,818	147,010	158,400	164,672	170,060	176,763	14,926	13,116	14,422	19,079	18,782	16,658	

*Receipts from loans represent value of commodities placed under CCC loans minus value of redemptions during the month.

Information contact: Roger Strickland (202) 219-0806.

Table 36.—Farm Production Expenses

	Calendar year											
	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990 F	1991 F	
\$ million												
Feed	20,655	18,592	20,371	20,239	17,247	17,876	17,958	20,620	22,722	22,000	20,000	to 23,000
Livestock	8,990	9,884	8,818	9,486	9,184	9,758	11,842	12,812	12,983	14,000	13,000	to 15,000
Seed	3,428	3,172	2,680	3,286	3,128	3,188	3,259	3,268	3,733	4,000	3,000	to 6,000
Farm-origin Inputs	33,262	31,447	31,879	33,112	29,659	30,821	33,059	30,700	39,438	40,000	38,000	to 42,000
Fertilizer	9,409	8,018	6,959	8,574	7,606	8,813	6,453	6,775	7,864	7,000	8,000	to 9,000
Fuels & oil	8,570	7,734	7,211	7,296	6,436	6,310	4,957	4,921	5,321	6,000	5,000	to 7,000
Electricity	1,747	2,041	1,982	2,060	1,878	1,795	2,166	2,231	2,100	2,000	2,000	to 3,000
Pesticides	4,201	4,282	3,870	4,688	4,334	4,324	4,612	4,443	5,721	6,000	5,000	to 7,000
Manufactured Inputs	23,927	22,076	20,022	22,618	20,153	18,242	18,077	18,370	20,697	21,000	21,000	to 23,000
Short-term interest	10,722	11,349	10,815	10,396	8,735	7,920	7,305	7,287	7,480	7,000	7,000	to 8,000
Real estate interest 1/	8,142	10,461	10,815	10,733	9,878	9,131	8,187	7,885	7,643	7,000	8,000	to 8,000
Total interest charges	19,864	21,830	21,430	21,129	18,613	17,052	15,492	16,172	15,123	14,000	14,000	to 16,000
Repair & maintenance 1/ 2/	7,021	8,428	6,529	8,730	8,558	8,445	8,828	8,889	7,794	8,000	8,000	to 10,000
Contract & hired labor	8,931	10,076	9,725	9,729	9,790	9,890	10,821	11,202	11,887	12,000	11,000	to 13,000
Machine hire & custom work	1,984	2,026	2,213	2,566	2,354	2,099	2,105	2,271	2,739	3,000	2,000	to 4,000
Marketing, storage, & transportation	3,523	4,301	3,904	4,012	4,127	3,852	3,988	3,281	4,214	5,000	4,000	to 6,000
Misc. operating expenses 1/	6,900	7,262	8,089	9,136	8,198	8,054	8,802	8,357	9,857	10,000	10,000	to 12,000
Other operating expenses	28,389	30,089	31,461	32,173	31,034	30,180	32,844	33,000	36,491	38,000	37,000	to 41,000
Capital consumption 1/	23,573	24,287	23,873	21,623	19,648	17,709	18,475	16,718	17,310	18,000	18,000	to 20,000
Taxes 1/	4,246	4,050	4,123	4,186	4,484	4,548	4,982	6,090	5,328	5,000	5,000	to 6,000
Net rent to nonoperator landlord	8,184	8,174	6,110	8,978	8,435	8,951	8,964	7,014	8,181	8,000	8,000	to 10,000
Other overhead expenses	34,003	34,511	33,106	34,787	32,567	29,209	28,420	28,820	30,819	32,000	31,000	to 35,000
Total production expenses	130,444	139,954	137,897	143,819	131,926	125,503	127,693	132,063	142,566	145,000	146,000	to 161,000

1/ Includes operator dwellings. 2/ Beginning in 1982, miscellaneous operating expenses include other livestock purchases & dairy assessments. Totals may not add because of rounding. F = forecast.

Information contacts: Chris McGath (202) 219-0804, Diane Bertelsen (202) 219-0806.

Table 37.—CCC Net Outlays by Commodity & Function

	Fiscal year										
	1983	1984	1985	1986	1987	1988	1989	1990	1991 E	1992 E	
	\$ million										
COMMODITY/PROGRAM											
Feed grains											
Corn	5,720	-934	4,403	10,624	12,346	8,227	2,663	2,450	2,364	2,066	
Grain sorghum	814	76	483	1,185	1,203	764	467	361	298	262	
Barley	268	69	336	471	394	87	45	-83	83	125	
Oats	11	5	2	26	17	-2	1	-6	14	16	
Corn & oat products	2	6	7	5	7	7	8	8	5	5	
Total feed grains	6,815	-758	6,211	12,211	13,987	9,053	3,384	2,721	2,737	3,073	
Wheat	3,419	2,636	4,801	3,440	2,836	878	53	806	2,847	2,519	
Rice	664	333	990	947	906	128	631	667	818	775	
Upland cotton	1,363	244	1,553	2,142	1,786	666	1,461	-79	389	823	
Tobacco	680	346	455	253	-346	-453	-367	-307	-217	-85	
Dairy	2,628	1,502	2,085	2,337	1,166	1,295	679	506	665	392	
Soybeans	288	-585	711	1,597	-476	-1,676	-86	5	22	-21	
Peanuts	-6	1	12	32	8	7	13	1	3	-3	
Sugar	49	10	184	214	-65	-246	-25	15	9	-26	
Honey	46	90	81	89	73	100	42	47	46	25	
Wool	94	132	109	123	162	1/ 6	93	104	175	175	
Operating expense 3/	328	362	346	457	535	614	620	618	721	773	
Interest expenditure	3,525	1,064	1,435	1,411	1,219	425	98	632	604	480	
Export programs 4/	398	743	134	102	276	200	-102	-34	1,256	1,053	
1988/89 Disaster/											
Livestock Assistance	0	0	0	0	0	0	3,919 2/	181	91	0	
Other	-1,542	1,295	-314	486	371	1,695	110	609	890	1,126	
Total	18,851	7,315	17,883	25,841	22,408	12,461	10,523	6,471	10,844	11,079	
FUNCTION											
Price-support loans (net)	8,438	-27	6,272	13,828	12,199	4,579	-926	-399	201	458	
Direct payments 5/											
Deficiency	2,780	612	6,302	6,166	4,833	3,971	6,798	4,176	6,117	6,574	
Diversion	705	1,504	1,525	64	382	8	-1	0	0	0	
Dairy termination	0	0	0	489	587	260	168	189	100	11	
Other	0	0	0	27	60	0	42	3	12	12	
Disaster	115	1	0	0	0	6	4	0	0	0	
Total direct payments	3,600	2,117	7,827	6,746	5,862	4,245	6,011	4,370	8,229	6,597	
1988/89 crop disaster	0	0	0	0	0	0	3,386 2/	5	5	0	
Emergency livestock/											
storage assistance	0	0	0	0	0	31	633	156	86	-0	
Purchases (net)	2,640	1,470	1,331	1,670	-479	-1,131	116	-48	381	-612	
Producer storage											
payments	984	268	329	465	832	658	174	185	26	0	
Processing, storage,											
& transportation	865	639	657	1,013	1,659	1,113	659	317	305	202	
Operating expense 3/	328	362	346	457	535	614	620	618	721	773	
Interest expenditure	3,525	1,064	1,435	1,411	1,219	425	98	632	604	480	
Export programs 4/	398	743	134	102	276	200	-102	-34	1,256	1,053	
Other	-1,807	679	-648	329	305	1,727	-48	609	1,030	1,004	
Total	18,851	7,315	17,883	25,841	22,408	12,461	10,523	6,471	10,844	11,079	

1/ Fiscal 1988 wool & mohair program outlays were \$130,635,000 but include a one-time advance appropriation of \$126,108,000, which was recorded as a wool program receipt by Treasury. 2/ Approximately \$1.5 billion in benefits to farmers under the Disaster Assistance Act of 1988 were paid in generic certificates & were not recorded directly as disaster assistance outlays. 3/ Does not include CCC Transfers to General Sales Manager. 4/ Includes Export Guarantee Program, Export Guarantee Program-Credit Reform, Direct Export Credit Program, Market Promotion Program, & CCC Transfers to the General Sales Manager. 5/ Includes cash payments only. Excludes Payment-in-kind in fiscal 83-85 & generic certificates in fiscal 86-88. E = Estimated in the fiscal 1992 President's Budget based on November, 1990 supply & demand estimates. Minus (-) indicates a net receipt (excess of repayments or other receipts over gross outlays of funds).

Information contact: Richard Paudalek (202) 447-6148.

Food Expenditures

Table 38.—Food Expenditure Estimates

	Annual			1990		1991	1990 year-to-date	
	1988 R	1989 R	1990 R	Nov	Dec	Jan P	Nov	Dec
	\$ billion							
Sales 1/ Off-premises use 2/ Meals & snacks 3/	255,096 196,452	272,076 205,927	288,292 218,144	24.1 17.7	25.9 18.1	23.3 16.5	200.4 200.1	286.3 218.1
Sales 1/ Off-premises use 2/ Meals & snacks 3/	288,929 215,162	289,482 215,825	288,225 218,064	23.8 17.4	25.6 17.8	22.6 16.2	200.6 200.3	288.2 218.1
Sales 1/ Off-premises use 2/ Meals & snacks 3/	4.8 8.7	6.7 4.8	5.2 5.9	5.7 9.3	2.9 4.8	5.2 2.4	5.5 6.0	5.2 5.9
Sales 1/ Off-premises use 2/ Meals & snacks 3/	-0.1 4.7	0.2 0.2	-1.1 1.1	-0.8 1.6	-2.7 0.3	1.1 -1.7	-1.0 1.2	-1.1 1.1

1/ Food only (excludes alcoholic beverages). Not seasonally adjusted. 2/ Excludes donations & home production. 3/ Excludes donations, child nutrition subsidies, & meals furnished to employees, patients, & inmates. P = preliminary.

NOTE: This table differs from Personal Consumption Expenditures (PCE), table 2, for several reasons: (1) this series includes only food not alcoholic beverages & pet food which are included in PCE; (2) this series is not seasonally adjusted, whereas PCE is seasonally adjusted at annual rates; (3) this series reports sales only, but PCE includes food produced & consumed on farms & food furnished to employees; (4) this series includes all sales of meals & snacks. PCE includes only purchases using personal funds, excluding business travel & entertainment. For a more complete discussion of the differences, see "Developing an Integrated Information System for the Food Sector," Agr.-Econ. Rpt. No. 575, Aug. 1987.

Information contact: Alden Manchester (202) 219-0880.

Transportation

Table 39.—Rail Rates; Grain & Fruit/Vegetable Shipments

	Annual			1990						1991
	1988 ¹	1989	1990	Jan	Aug	Sept	Oct	Nov	Dec	Jan
Rail freight rate index 1/ (Dec. 1984=100)										
All products	104.8	106.4	107.5	107.1	107.3	107.3	107.9 P	108.6 P	108.6 P	108.6 P
Farm products	105.6	106.4	110.4	109.3	110.8	111.0	112.1 P	111.9 P	111.9 P	111.6 P
Grain	106.4	108.7	110.1	109.1	110.6	110.6	111.4 P	111.5 P	111.6 P	111.1 P
Food products	103.2	103.9	105.3	105.8	104.6	104.7	105.5 P	106.7 P	106.7 P	106.5 P
Grain shipments										
Rail carloadings (1,000 cars) 2/	30.7	28.4	27.6	32.2	26.8 P	24.0 P	27.1 P	27.2 P	24.4 P	26.6 P
Fresh fruit & vegetable shipments										
Piggy back (1,000 cwt) 3/ 4/	635	602	421	467	338	409	320	362	341	277
Rail (1,000 cwt) 3/ 4/	807	800	630	705	183	394	423	537	606	405
Truck (1,000 cwt) 3/ 4/	9,670	8,745	9,645	7,760	8,036	8,000	9,062	8,735	9,360	8,251
Cost of operating trucks hauling produce 5/										
Owner operator (cte./mile)	118.7	124.1	131.0	128.9	133.6	135.4	138.2	136.8	135.9	136.4
Fleet operation (cte./mile)	118.4	123.4	130.6	128.7	135.6	136.1	137.5	136.4	135.4	135.9

1/ Department of Labor, Bureau of Labor Statistics. 2/ Weekly average; from Association of American Railroads. 3/ Weekly average; from Agricultural Marketing Service, USDA. 4/ Preliminary data for 1988 & 1990. 5/ Office of Transportation, USDA. P = preliminary.

Information contact: T.G. Hutchinson (202) 219-0840.

Indicators of Farm Productivity

Table 40.—Indexes of Farm Production Input Use & Productivity¹

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990 2/
1977=100										
Farm output	118	116	96	112	118	111	110	102	114	117
All livestock products 3/	109	107	109	107	110	110	113	118	116	117
Meat animals	106	101	104	101	102	100	102	105	104	101
Dairy products	108	110	114	110	117	116	116	118	117	120
Poultry & eggs	119	119	120	123	128	133	144	148	153	166
All crops 4/	117	117	88	111	118	109	108	92	107	112
Feed grains	121	122	87	118	134	123	106	73	108	112
Hay & forage	106	109	100	107	106	106	102	89	101	101
Food grains	144	138	117	129	121	107	107	96	107	136
Sugar crops	107	96	93	95	97	106	111	105	105	106
Cotton	109	85	55	91	94	69	103	107	86	102
Tobacco	108	104	75	90	81	63	62	72	71	84
Oil crops	114	121	91	106	117	110	108	89	106	102
Cropland used for crops	102	101	88	99	98	94	88	87	90	—
Crop production per acre	115	116	100	112	120	116	123	106	119	—
Farm input 6/	102	99	96	96	92	89	89	87	88	—
Farm real estate	104	102	101	99	97	96	95	94	93	—
Mechanical power & machinery	98	92	89	86	80	77	73	72	73	—
Agricultural chemicals	129	118	102	120	115	109	111	111	122	—
Feed, seed, & livestock purchases	108	107	103	106	102	110	117	110	119	—
Farm output per unit of input	116	117	99	117	128	124	124	117	128	—
Output per hour of labor										
Farm 6/	123	125	99	121	139	139	142	134	148	—
Nonfarm 7/	100	99	102	105	106	108	109	111	112	—

1/ For historical data & indexes, see Economic Indicators of the Farm Sector: Production & Efficiency Statistics, 1988, ECIFS 5-6. 2/ Preliminary Indexes for 1990 based on Crop Production: 1990 Summary, released in January 1991, & unpublished data from the Agricultural Statistics Board, NASS. 3/ Gross livestock production includes minor livestock products not included in the separate groups shown. It cannot be added to gross crop production to compute farm output. 4/ Gross crop production includes some miscellaneous crops not in the separate groups shown. It cannot be added to gross livestock production to compute farm output. 5/ Includes other items not included in the separate groups shown. 6/ Economic Research Service. 7/ Bureau of Labor Statistics. — = not available.

Information contact: Jim Hauver (202) 219-0432.

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